

# PSYCHOLOGICAL ABSTRACTS

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PUBLISHED MONTHLY, WITH TWO ISSUES DURING DECEMBER, BY

THE AMERICAN PSYCHOLOGICAL ASSOCIATION  
PRINCE AND LEMON STS., LANCASTER, PA.

*Business Offices:* PSYCHOLOGICAL REVIEW COMPANY  
LANCASTER, PA., AND PRINCETON, N. J.

Subscription, \$6.00 per year; Foreign, \$6.25.

Entered as second-class matter February 5, 1927, at the post-office at Lancaster, Pa., under the Act of March 3, 1879

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## GENERAL

989. Becher, E. [Ed.] *Bericht über den X. Kongress für experimentelle Psychologie in Bonn (vom 20.-23. April, 1927)*. (Report of the 10th Congress of experimental psychology in Bonn, April 20-23, 1927.) Jena: G. Fischer, 1928. Pp. iv + 200.—The report contains collective reviews on social psychology by Charlotte Bühler (II: 2545)—and on experimental results of *Gestalt* psychology by Friedrich Sander (II: 3008).—Among the lectures the following are mentioned: N. Ach, The origin of the consciousness of the freedom of the will (II: 2416); U. Ebbecke, The Significance of studies of internal secretion for psychology (II: 2424); K. Goldstein, The reciprocal influence of motor and sensory processes (II: 2355); A. Guttmann, Experimental studies of quarter tone music; H. Henning, The partner- and two-person-experiment (II: 2652); St. Krauss, Perceptual analysis of illumination (II: 2384); A. Krogus, Psychology of the blind; W. Moede, Measures of fatigue; R. Sommer, Tests of electrodiagnostic methods of Dr. Rahner and Dr. Bissky (II: 2369); G. Störing, The Problem of the psychology of mental science and reason (II: 2370); W. Wirth, The nature of psychophysical law (II: 2092).—W. Wirth (Leipzig).
990. Blonski, P. P. The subject of psychology and psychopathology from a genetic standpoint. *J. Genet. Psychol.*, 1928, 35, 356-373.—A genetic classification of psychological phenomena is suggested in terms of degrees not of consciousness but of vigilance. At the most primitive level—above the level of sleep—are the feelings and cravings (hunger, sex, fear, etc.) coördinated by the autonomic nervous system; at the next stage is the protopathic emotional-instinctive behavior correlated with subcortical functions; at the highest level of complete vigilance are epieritical distinctions, finely coördinated reactions, speech and articulate thought, attributed to cortical functioning. Psychopathology is defined as a science dealing with the progressive degradation of life from the level of maximum vigilance to the primitive or to the sleeplike level of vigilance. Some laws of this degradation process are suggested.—J. F. Dashiell (North Carolina).
991. Boring, E. G. Psychological necrology (1903-1927). *Psychol. Bull.*, 1928, 25, 621-625.—J. F. Dashiell (North Carolina).
992. Bouman, H. D. *Sur une méthode d'analyse des sons à l'aide de la résonance électrique appliqués aux voyelles néerlandaises*. (A method of sound analysis by electrical resonance, applied to Dutch vowels.) *Arch. néerl. de physiol.*, 1928, 13, 50-92.—C. P. Stone (Institute for Juvenile Research).
993. Elder, W. *Studies in psychology*. London: W. Heinemann, 1927. Pp. xv + 212. 8s. 6d.—W. S. Hunter (Clark).
994. Haldi, J. *Chronicles, cerebral localization of psychic functions—an historical and critical survey*. *New Scholas.*, 1928, 2, 367-381.—This is a brief summary of the theories of localization from Plato to Flechsig.—J. P. Hylan (Stoneham, Mass.).
995. Heath, A. E. *How we behave: an introduction to psychology*. London: Longmans, Green, 1927. Pp. vi + 90.—The topics discussed in this book are: the nature and aims of psychology; the subject matter of psychology; the development of animal behavior; and the development of human behavior. The author's aim is less to impart facts than to stimulate questioning and indicate possible lines of search for answers. He is not a behaviorist in the technical sense, but is interested in "the mental aspects of behavior." He has been influenced largely by James Ward, McDougall, Rivers and Freud, but he cannot be called fairly a follower of any of these, for he has his own original contributions to make. His discussions contain constant illustration, and he is a firm believer in a scientific approach to the problems of psychology.—F. C. Bartlett (Cambridge, England).
996. Hollander, B. *In search of the soul; and the mechanism of thought, emotion, and conduct*. 2 vols. London: Kegan, Paul, 1928. \$10.00.—W. S. Hunter (Clark).
997. Hsiao, H. H. Some contributions of *Gestalt* psychology from 1926 to 1927. *Psychol. Bull.*, 1928, 25, 613-620.—(1) The study of color experiences furnishes a rich field for *Gestalt* psychology. (2) Hertz's observations of the raven confirm some of Köhler's findings. (3) Study of habit as an organic unit throws light on the method of analysis. (4) The relation between retention and organic need has been shown in new phases. (5) A new conception of feeling harmonizes perfectly with *Gestalt*. (6) Importance of *Gestalt* in visual perception has been more clearly demonstrated.—J. F. Dashiell (North Carolina).
998. Knotts, J. R., & Miles, W. R. Notes on the history and construction of the stylus maze. *J. Genet. Psychol.*, 1928, 35, 415-427.—A short review of the different types of construction of stylus mazes used in the past is followed by description of a simple type recommended on account of several features.—J. F. Dashiell (North Carolina).
999. Louttit, C. M. *Bibliography of bibliographies on psychology, 1900-1927*. *Bull. Nat. Res. Council*, No. 65, 1928. Pp. 108.—A compilation consisting of four parts, as follows: I. A list of general works searched. II. A list of general bibliographies



in psychology and allied subjects. III. A complete list of bibliographies, including those appended to articles, monographs, handbooks and textbooks, arranged alphabetically by authors. IV. A subject index, in which bibliographies in Part III are referred to by number.—*R. W. Gilbert* (New York).

1000. **Luria, A. R.** *Psychology in Russia.* *J. Genet. Psychol.*, 1928, 35, 347-355.—Modern Russian psychology is showing a strong prevalence of tendencies toward the objective study of human behavior. It may be divided into several branches. The work of the physiological school of Pavlov is carried on on a broader basis, with much recognition of social factors. The reflexology of Bekhterev has much influence, likewise, both schools applying the conditioning experiment to man. Kornilov has published significant experimental and theoretical material on energy and its expenditure. Blonski has given psychological phenomena a thoroughgoing genetic interpretation. Basov has shown the value of systematic objective observations of child behavior. Other aspects of Russian psychology will be presented later.—*J. F. Dashiell* (North Carolina).

1001. **Miles, W.** *The time-magnification of motion: slow motion photography and momentary visual exposure.* *J. Gen. Psychol.*, 1928, 1, 592-595.—*H. Cason* (Rochester).

1002. **Miles, W.** *On having the 16 mm. film run backwards.* *J. Gen. Psychol.*, 1928, 1, 595-597.—The author discusses the possible uses of backward projection of moving pictures in the study of perception.—*H. Cason* (Rochester).

1003. **Miles, W.** *The combination splicer for 16 mm. films.* *J. Gen. Psychol.*, 1928, 1, 597-599.—The author describes the uses that can be made of the Bell and Howell splicing and winding outfit, the Eastman Kodascope film-splicing outfit, and the Wellsworth Beebe binocular loupe.—*H. Cason* (Rochester).

1004. **Miles, W.** *Recording by embossing against a wire background.* *J. Gen. Psychol.*, 1928, 1, 599-600.—The author describes an inexpensive method of using the embossing method in recording on moving surfaces where considerable energy is available for the actual marking.—*H. Cason* (Rochester).

1005. **Miles, W.** *A maze graph by use of blotting paper.* *J. Gen. Psychol.*, 1928, 1, 600-602.—*H. Cason* (Rochester).

1006. **Moss, F. A.** *Your mind in action.* New York: Houghton, Mifflin, 1929. Pp. x + 477. \$4.00.—Purporting to be a treatise on the applications of psychology, this volume covers "Determining forces in human behavior," individual differences, and industrial psychology. Under the first mentioned caption we find sections on drives and resistances, effect of internal stimuli, effect of drugs, and the effect of external stimuli on behavior. Differences due to race, sex, age, family inheritance, past experience, and emotional conditioning, each receive a chapter. The applications of psychology to general medicine, mental disorders, law, business, personnel problems, street and highway traffic, politics, and education are treated in separate chapters. The

fundamental postulate of the author, which influences his treatment of the whole field of applied psychology, is that "The behavior of any animal, be he rat, horse, or human, is the resultant of his drives to action and the opposing resistances." This law "is as vital and generally useful to the psychologist as the law that for every action there is an equal and opposite reaction is to the physicist." The discussions of the various fields are based solely upon the experimental findings in animal and human psychology.—*N. L. Munn* (Clark).

1007. **Ohm, J.** *Die Hebelnystagmographie. Ihre Geschichte, Fehler, Leistungen und Vervollkommnung.* (Lever-nystagmography. Its history, its sources of error, its achievements and its perfection.) *Graefes Arch. f. Ophth.*, 1928, 120, 235-252.—The author describes and defends his experimental methods for studying nystagmus, replying to the criticism of Cords (see II: 2071).—*D. McL. Purdy* (California).

1008. **Port, K.** *Betrachtungen zu Husserls Einteilung der Denkakzte und ihrer erkenntnistheoretischen Bedeutung.* (Remarks on Husserl's classification of the acts of thought and its epistemological significance.) *Arch. f. d. ges. Psychol.*, 1928, 63, 369-412.—*D. McL. Purdy* (California).

1009. **Reik, T.** *Wie man Psychologe wird.* (How one becomes a psychologist.) Wien: Int. Psychoanal. Verlag, 1928.—*W. S. Hunter* (Clark).

1010. **Sander, F.** *Bibliographie der deutschen und ausländischen Literatur des Jahres 1926 über Psychologie, ihre Grenzgebiete und Hilfswissenschaften. Ausländische Literatur.* (Bibliography of German and foreign literature of the year 1926 on psychology, its boundary-domains and its auxiliary sciences. Foreign literature.) *Arch. f. d. ges. Psychol.*, 1928, 62, 481-600; 63, 413-513.—3,735 titles. The section covering German literature appears simultaneously in the *Zeitschrift für Psychologie*.—*D. McL. Purdy* (California).

1011. **Schniermann, A. L.** *Present-day tendencies in Russian psychology.* *J. Gen. Psychol.*, 1928, 1, 397-404.—A general description of the points of view of I. P. Pavlov, V. M. Bekhterev, K. N. Kornilov, M. J. Basov, and W. A. Wagner.—*H. Cason* (Rochester).

1012. **Spranger, E.** *Types of men. The psychology and ethics of personality.* Halle: Niemeyer, 1928. Pp. xii + 402.—This book presents a system of sociological-ethical theory rather than an empirical research in the psychological field. In contrast with the traditional psychology that emphasizes the subjective and individualistic, Spranger pleads for a *Geisteswissenschaft* that emphasizes objective, public, trans-subjective, over-individual phenomena. And in place of conscious structures, he deals with mind as "a meaningful content of functions in which different value tendencies are correlated in the unity of consciousness. These value attitudes are determined by specific normative laws of value which correspond to the various classes of value. The empirical self finds itself already surrounded by over-individual mental configurations of value which in their realization have become detached from the ex-



periencing selves. In them the constructive laws of value have already created an over-individual meaning which transcends the individual." The meaningful experience of the individual upon analysis is found to involve certain basic attitudes, which, although interwoven throughout experience, are yet quite distinguishable: the economic, the cognitive or theoretic, the esthetic, and the religious. The individual's interrelation with other individuals in human society is the occasion for the appearance of two more basic attitudes: power or the political, and sympathy or the social. From the primitive or "instinctive" stage these attitudes undergo elaboration into productive and cultural forms. From these basic attitudes Spranger constructs theoretically "the ideally basic types of individuality": the economic type, the theoretic type, etc. Several chapters are given over to ethical discussion, especially in terms of conflicts and hierarchies of value; and one is devoted to analysis of technique, law, and education as three lines of cultural development.—J. F. Dashiell (North Carolina).

1013. Stone, C. P. An improved treadle for the platform escape box. *J. Genet. Psychol.*, 1928, 35, 471-473.—J. F. Dashiell (North Carolina).

1014. Störing, G. Zur Frage der geisteswissenschaftlichen und verstehenden Psychologie. (The question of mental-science and understanding psychology.) *Arch. f. d. ges. Psychol.*, 1928, 62, 443-480.—Conclusion of the article abstracted in II: 559 and III: 537. This section contains a criticism of the *geisteswissenschaftliche Psychologie* of Spranger. It is shown that Spranger has misapprehended in many ways the aims and assumptions of the "natural-science psychology" which he seeks to supplement with his new type of science. He is wrong in supposing that natural-science psychology is interested only in elements; its problem is rather to explain in terms of elements. Spranger holds that current psychology is inadequate because it is not a "structure-psychology"—because it neglects the influence of the whole personality on every particular psychical event. In a concrete experimental situation, however, we can control the adjustment of attention so that the influence of the whole personality is reduced to a minimum, without the laws of the phenomenon studied being thereby subjected to any serious distortion. It is to be emphasized that the effect of the whole personality, and of other psychical wholes, has its very definite limits; e.g., in a thought-process, the relations thought of must remain unaltered, even when they enter as parts into a higher totality; otherwise no valid conclusions would be possible. Störing objects to Spranger's definition of "understanding" as "putting oneself in another's place" (*Sichhineinversetzen*). There is an inferential type of understanding of other persons which does not involve such an act, and this type alone can furnish us with causal laws of process. Spranger's type belongs more to popular psychology and gives us only certain "uniformities" of process. According to Spranger, *Sichhineinversetzen* is a deductive affair, because a general conclusion is realized from a single instance. Spranger is obviously contrasting

it with the old-style induction which requires a piling up of instances. But on the modern theory, an induction may be accomplished on the basis of a very few cases or even a single case. There is no reason to believe that "understanding" is a matter of deduction. In closing his polemic against "understanding psychology," Störing concludes that all the grounds urged in favor of such a science are illusory, and that natural-science psychology is competent to furnish the psychological basis for the cultural sciences.—D. McL. Purdy (California).

1015. Stumpf, C. William James nach seinen Briefen. Leben, Charaktere, Lehre. (William James, from his letters: life, character, doctrine.) Berlin-Charlottenburg: R. Heise, 1928. Pp. 47. M. 1.80.—W. S. Hunter (Clark).

1016. von Muralt, A. August Forel. Zurich: Orell Füssli Verlag, 1928. Pp. 56.—A sketch portraying Forel's personal life and his activities in science, medicine, and social reform. Illustrated.—W. S. Hunter (Clark).

1017. Wirth, W. Zur Widerlegung der Behauptungen von Krisen in der modernen Psychologie. (A refutation of the assertions of crises in modern psychology.) *Psychol. u. Med.*, 1927, 2, 100-131.—The author tries to show that the development of modern psychology has been an orderly progress, and that there have been no real crises or revolutions. Even Wundt's work, including the founding of the first laboratory for experimental psychology, was the natural outgrowth of previous investigations by Purkinje, Weber, Helmholtz, Hering, and others, and it did not mark a crisis. Many subsequent workers have claimed that their discoveries marked a crisis, but this was an exaggeration. Several of these modern discoveries, methods, and theories had been anticipated by previous investigators. Behaviorism, started in America in 1912 as something new, was not really original. In 1895, W. Heinrich, influenced by Avenarius, had assumed a behavioristic point of view. Watson applied to human beings a system Descartes had already applied to animals. Münsterberg, in 1890, had distinguished between a scientific, analytic, descriptive psychology and a causal-explanatory psychology. *Gestaltpsychologie* and *Ganzheitspsychologie* are based on principles that were also recognized by earlier investigators. Psychologists should lay less emphasis on secondary differences of standpoint, and remember that objective results will remain valid, no matter how theories may change.—M. F. Martin (West Springfield, Mass.).

[See also abstract 1064.]

# SENSATION AND PERCEPTION

1018. Benjamins, C. E., & Huizinga, E. Untersuchungen über die Funktion des Vestibularapparates bei der Taube. III. (Investigations as to the function of the vestibular apparatus in the pigeon. III.) *Pflüg. Arch. f. d. ges. Physiol.*, 1928, 221, 104-118.—Study of 60 pigeons shows that the pars superior of the labyrinth (utricle and the

three ampullae) may be sharply distinguished from the pars inferior (sacculi) as to functional significance. Removal of the pars superior produces the same phenomena as removal of the whole labyrinth, except that rotation of the eye is not disturbed. Removal of the pars inferior alone is followed by no disturbances except the disappearance of the rotary movements of the eye. The function of the pars inferior is thus restricted to a very limited rôle, involving only these rotary eye movements.—*L. T. Spencer* (Yale).

1019. **Braun, G.** *Zur Therapie und Prognose des Schielens.* (On the therapy and prognosis of squint.) *Graefes Arch. f. Ophth.*, 1928, 120, 583-634.—The author reports findings which are of interest for the theory of binocular vision. Squinters can be divided into three classes in respect to their visual perceptions. The members of the first class retain the normal correspondence between the two retinæ. After their defect is corrected they acquire binocular vision and depth of perception. Those in the second class possess an acquired anomalous mode of localization in addition to the innate mode. They can develop a small degree of binocular vision after operation, but no depth perception. The members of the third class have only an anomalous correspondence; for them even a simple binocular color mixture is impossible. In course of time they build up a new anomalous correspondence on the basis of the new relationship between the eyes. In the first two groups the inhibition of the fovea of the squinting eye subsides after the correction. But in the third group the inhibition increases and in some cases becomes practically complete. In other cases it remains incomplete, and spontaneous paradoxical diplopia ensues. 36 references.—*D. McL. Purdy* (California).

1020. **deSilva, H. R.** *Kinematographic movement of parallel lines.* *J. Gen. Psychol.*, 1928, 1, 550-577.—This is a study of the advantages of the kinematograph in securing information about the perception of movement, especially in regard to the size variable. Parallel lines were used as stimuli. "Visual movement produced by successively appearing parallel lines depends upon a complex arrangement of stimulus determinants to maintain it as a good illusion. Unless conditions are correctly arranged the phenomenon ceases to be perceived as movement and becomes inferred. Judgments upon optimal apparent movement made with a gross stimulus attitude are likely to be unreliable because of the influence of secondary attributes such as swiftness, jerkiness, greyness, etc. O's may wittingly or unwittingly adopt one or another aspect of the perceptual pattern as their primary criterion of judgment. Therefore, because observable secondary attributes vary as the stimulus varies, and because an O's criterion for judging optimal movement may vary, it follows that we should not rely altogether on gross judgments upon the stimulus which produces apparent movement."—*H. Cason* (Rochester).

1021. **Duke-Elder, W. S., & Duke-Elder, P. M.** *A histological study on the action of short-waved light upon the eye, with a note on "inclusion bod-*

*ies.*" *Brit. J. Ophth.*, 1929, 13, 1-37.—64 rabbits were radiated with a quartz mercury vapor lamp. Cocaine was injected into the eye before radiation and the cornea kept moist by a saline solution. One eye was used as a control. The object was to seek elucidation on local therapeutic action of short-waved light in diseases of the anterior segment of the eye. Criteria of dosage were studied with a view to correlation with other studies on the pathogenesis of cataract. The clinical and histological appearance of the abiotic reaction as seen in experimentally radiated animals are described in the cornea, the conjunctiva, the iris, the lens, and the retina. General abiotic reaction is a photochemical denaturation affecting the proteins of the cells. With regard to the cornea, the therapeutic effect of ultra-violet light in inflammatory, degenerative, and ulcerative conditions is discussed. Definite abiotic changes in the retina affecting the ganglion cells and the inner nuclear layer are described.—*R. Stone* (Clark).

1022. **Ebbecke, U.** *Über positive und negative Nachbilder, ihre gegenseitige Beziehung und den Einfluss der lokalen Adaptation.* (On positive and negative after-images, their mutual relations and the influence of local adaptation.) *Pflüg. Arch. f. d. ges. Physiol.*, 1928, 221, 160-188.—It is shown that the eye adapts itself to its after-images in the same way that an adjustment of external stimulus differences takes place between inner and outer fields by simultaneous induction, or in the same way the eye adapts itself to differences of entoptic excitation. The visibility of after-images and the presence of optic after-stimulation are distinguished. The latter is usually invisible for the most part and becomes apparent only with a change of illumination. In contrast with after-images, these after-stimulations may continue for long periods, e.g., pathological scotoma. The adjustment, such as through local adaptation or simultaneous induction, which hinders the transmission of peripheral excitation differences to consciousness, is antagonistic to simultaneous contrast and identical with successive contrast and occurs in a central, non-retinal, intermediate part of the nerve path. A concept based on the principle of reciprocal innervation is used to show how positive and negative after-images originate and how their behavior may be explained.—*L. T. Spencer* (Yale).

1023. **Ebbecke, U.** *Über eine neue Nachbildphase, das positive Hellbild.* (On a new after-image phase, the positive brightness-image.) *Pflüg. Arch. f. d. ges. Physiol.*, 1928, 221, 189-197.—A stage in the after-effect of optic stimulation is described in which the after-image, which previously tends to be positive in the dark and negative in the light, seems against the background to be bright under illumination and dark under reduced lighting. An explanation for the phenomenon is offered.—*L. T. Spencer* (Yale).

1024. **Ebbecke, U.** *Über spontane Nachbildschwankungen und das Verhältnis von Nacherregung und Induktion.* (On spontaneous fluctuations of the after-image and the relation of after-stimulation and induction.) *Pflüg. Arch. f. d. ges. Physiol.*, 1928,

221, 198-212.—An attempt was made to discover the conditions for the appearance of a purely negative, a purely positive, or a spontaneously alternating type of after-image and to trace the relation to the common action of the retinal after-stimulation and the central, antagonistic innervation.—L. T. Spencer (Yale).

1025. Fazakas, A. *Über die zentrale und periphere Farbensehschärfe.* (On central and peripheral chromatic visual acuity.) *Graefes Arch. f. Ophth.*, 1928, 120, 555-566.—The author measures "chromatic visual acuity" in terms of the reciprocal of the minimum size which a colored surface must have in order that its color shall be recognized. At a given retinal point this acuity is different for different colors—highest for red and yellow, much lower for green, and lower still for blue. Pigment papers were used. For a given color the acuity decreases rapidly with distance from the fixation point; at 85° eccentricity it sinks to about 1/100 of its central value. The curve representing its dependence on eccentricity is similar to that for the ordinary "visual acuity." The "isopters" or lines of equal chromatic acuity are approximately elliptical (with long horizontal axes), parallel to each other and to the boundary of the visual field. The lower acuity of the periphery is explained, partly but not entirely, by the imperfection of the optical image. Against an explanation in terms of the duplicity theory, it is to be pointed out that the diminution in acuity is much greater than the diminution in the number of cones. Moreover, the region surrounding the fovea, but containing rods as well as cones, has the same chromatic acuity as the center. Another striking circumstance is that the acuity is much greater along the horizontal than along the vertical meridian. This is to be ascribed to the effect of experience. The high acuity of the center is probably to be attributed to the same factor. Pathological cases, in which the fovea is put out of commission and the periphery has to take over the function of fixation, are in favor of the view that acuity is in very large measure dependent on experience.—D. McL. Purdy (California).

1026. Gehrcke, E. *Über die Haidingerschen Polarisationbüschel auf der Macula.* (On Haidinger's polarization-brushes in the macula.) *Graefes Arch. f. Ophth.*, 1928, 120, 567-573.—The entoptic phenomenon known as Haidinger's brushes is described by Helmholtz (*Physiol. Optics*, Eng. trans., 2, 304-308), and more exhaustively by Holm (*Arch. f. Ophth.*, 1922). Gehrcke finds that this phenomenon is not visible to the majority of men under the age of 30, but is seen by most men above that age. In the case of women the age-factor is less pronounced. The effect is dependent on the intensity, color and state of polarization of the light used. The admixture of yellow light tends to extinguish the effect, but red light does not act thus. Elliptically polarized light gives a broader yellow brush than does linearly polarized. The form and color of the brushes vary with the individual. To explain the phenomenon the author has recourse to the retinal substances underlying color-vision, and draws a parallel to Weigert's phenomenon, viz., the occur-

rence of dichroism in a silver chloride layer illuminated with polarized light.—D. McL. Purdy (California).

1027. Geldard, F. A. *The measurement of retinal fatigue to achromatic stimulation. II.* *J. Gen. Psychol.*, 1928, 1, 578-590.—"Retaining the assumption of independence of contiguous retinal areas, the data of former experiments [see II: 840] have been corrected to give measures of retinal fatigue that are closer approximations to the 'true' values. Having obtained the fatigue curves for three intensities, the original assumption of independence has been tested and found to be incorrect. By a revised method, in which fatigue could be induced in one eye and comparison made with the unaffected eye, measures have been obtained which may be taken to be truly representative of the process. Comparison of the monocular and binocular data has made possible a reinterpretation of the former. In conclusion there are suggested certain applications of the facts of fatigue and contrast to problems of light measurement."—H. Cason (Rochester).

1028. Kiesow, F. *Metallic luster in cinematographic pictures.* *J. Gen. Psychol.*, 1928, 1, 591-592.—In the case of metallic luster in cinematographic pictures we should speak of assimilative metallic luster instead of the apparent or false metallic luster of Kirschmann. Great importance should be ascribed to the assimilative process in perception.—H. Cason (Rochester).

1029. Koch, B. C. *The apparent weight of colors.* New York: Methodist Book, 1928. Pp. 27. \$0.50.—W. S. Hunter (Clark).

1030. Krauss, S. *Tatsachen und Probleme zu einer psychologischen Beleuchtungslehre auf Grundlage der Phänomenologie.* (Facts and problems for a psychological doctrine of illumination based on phenomenology.) *Arch. f. d. ges. Psychol.*, 1928, 62, 179-224.—The author rejects the theory of Katz, who holds that illumination is not a primary datum of vision but a product of experience gained in our dealings with surface-colors. Bühler, on the other hand, maintains that illumination is perceived in its own right as "space-filling brightness." Color-impressions, according to him, are founded on two elements: the light coming from the visual object, and the optical quality of the visual space lying in front of the object. The experiments here described support this conception. The arrangement was such that one could observe an isolated portion of space through which colored light was streaming, no inclosing surfaces being available as criteria. The observers reported "an indefinite depth, toned with a (difficultly recognizable) colored luminous glimmer." Even when a background was used, an "absolute" impression of illumination without regard to the ground was possible. A layer of illuminated space could still be seen as such even when three episcotisters, all of different color, were simultaneously rotated in front of it. Furthermore, just as it is possible to see two colors, one behind the other, in the same visual direction (Fuchs), so can two illuminations be perceived under like conditions. The phenomenon of "illuminated shadows" is a complex ex-



ample of this sort of perception. Spaces filled with colored illumination are "phenomenally shortened"; their death is underestimated. Further experiments concern the function of the figure-ground relationship in color-transformation (Krauss argues against Granit's view that transformation is primarily due to *Gestalt*-factors), the phenomenon of "*Gestalt*-accentuation," the change in illumination-perceptions under the influence of *Gestalten*, and the demonstration of a *sui generis* illumination after-image. The author propounds a "general duplicity-theory," according to which the perception of illuminations is mediated by the rods. He has shown that a monochromat does not experience illumination as a separate perceptual entity. Krauss discusses the application of this theory to the problem of transformation. Among the other topics dwelt upon are: the development of the doctrine of illumination in terms of Husserl's phenomenology, the importance of illumination-perceptions for light-technology and painting, and the application of Bühler's theory of perceptual meanings to this domain. Bibliography of 44 titles.—D. McL. Purdy (California).

1031. Metcalf, J. T. Cutaneous and kinaesthetic senses. *Psychol. Bull.*, 1928, 25, 569-581.—A review of literature, mainly experimental, including 62 titles.—J. F. Dashiell (North Carolina).

1032. Miles, W. R. Visual illusions of motion. *Scient. Mo.*, 1928, 27, 481-491.—Many illusions are popularly and clearly described, such as those of the windmill, the motion picture, the waterfall, and several associated with the movements of railroad trains.—J. F. Dashiell (North Carolina).

1033. Nadel, S. Über einen eigentümlichen Fall von Tontaubheit. Neue Beiträge zum Zweikomponentenproblem. (A peculiar case of tone deafness. New contributions to the problem of two components.) *Arch. f. d. ges. Psychol.*, 1928, 64, 34-80.—The case of a student is described who had had infantile paralysis at the age of five and lost his musical ability. He recognized folk-songs that he had learned before his illness, but was unable to recognize or learn new melodies. Slight tonal changes in old melodies made it impossible for him to recognize them also, while this was not the case with changes in rhythm, for which he had no sense whatever. His threshold of pitch discrimination was about a major third, which decreased to about a minor second after a practice of 13 weeks. However, the phrases of melodies that were recognized consisted of steps that were much smaller than these thresholds. Other material is presented showing also that isolated tones and meaningful combinations are factors that influence the threshold of pitch discrimination. This case is used by the author to throw light on the problem of two components in tone experience. Following Revesz he assumes pitch and tonal quality as the two components of tone perception, that is, isolated or meaningless and configurated and meaningful acoustical material. He differs from Revesz in assuming that the two components are not of equal significance, pitch having a lower and quality a higher significance. He also separates similarity of octaves from quality. Perception of pitch is "ex-

ternal" hearing, that of quality "internal" hearing. Musical ability depends on the latter.—K. F. Muenzinger (Colorado).

1034. Ohm, J. Zur Augenzitterkunde. 12. Mitteilung. Der optische Drehnystagmus als objektives Hilfsmittel der Augenprüfung. (On the twitching movements of the eyes. Part 12. Optical rotation-nystagmus as an objective method for eye-testing.) *Graefes Arch. f. Ophth.*, 1928, 120, 670-688.—Serious anomalies of the dioptric apparatus have pronounced effects on optical nystagmus (nystagmus due to visual stimulus).—D. McL. Purdy (California).

1035. Piéron, H. Influence du rapport des phases sur la durée d'interruption d'une stimulation lumineuse périodique à la limite du papillotement. (The influence of the relation of phase on the duration of interruption of a periodic light stimulation on the borderline of flicker.) *C. r. Soc. biol.*, 1928, 99, 398-400.—A periodic light stimulation, reckoned from a certain critical frequency, gives rise to a stable impression without flicker. This frequency admits of an absolute duration of interruption which measures the persistence of light impressions, a duration which diminishes when the intensity of the stimulation increases. The author wished to investigate the question whether or not this limiting duration of interruption remained identical when, in the period, the relation of the phase of excitation to the phase of interruption was changed while the same level of average intensity was maintained. Contrary to what one would anticipate, the limiting duration of interruption was not independent of the relation of phase. These durations increased with the relative magnitude of the interruption. The author made the observation that one cannot without difficulty integrate into the system of facts concerning the light process this fact that the duration limit, compatible with a stability of light impressions, increases when the relation of these phases varies to the detriment of the stimulation.—Math. H. Piéron (Sorbonne).

1036. Scharnke, A. Ueber Beziehungen zwischen den eidetischen Phänomenen und den Sinnestäuschungen. (The relations between eidetic phenomena and sensory illusions.) Berlin: Elsner, 1927.—W. S. Hunter (Clark).

1037. Siegfried, W. Experimentelle Untersuchungen über den angeblich schädigenden Einfluss der ultravioletten Strahlen auf die Adaptation des Auges. (Experimental studies on the supposed injurious effect of ultra-violet rays on the adaptation of the eye.) *Graefes Arch. f. Ophth.*, 1928, 120, 526-539.—It is shown that the highly concentrated ultra-violet light of a Bach lamp ("*Höhensonne*") causes no appreciable reduction in the eye's power of adaptation, even after 15 minutes' action on the macular region. On the other hand, the unconcentrated light of a 50 c.p. incandescent lamp, deprived of ultra-violet rays by an oiled-paper filter, causes a pronounced decrease of adaptation. In the experiments described, the ultra-violet light was applied to one eye, the visible light to the other. The effect of the latter light serves as a control, and obviates the objection that the ultra-violet may not have had sufficient time to act. This result corroborates Vogt's

experimental findings, which go to prove that the ultra-violet of sunlight, even in high concentration, is relatively harmless to the eye, and that the erythropsia of aphakics and snow-blinded persons has nothing to do with ultra-violet.—D. McL. Purdy (California).

1038. Stumpf, O. *Gefühl und Gefühlsempfindung*. (Feeling and feeling-sensation.) Leipzig: J. Barth, 1928. Pp. xvi + 140.—W. S. Hunter (Clark).

1039. Tinker, M. A. The relative legibility of the letters, the digits, and of certain mathematical signs. *J. Gen. Psychol.*, 1928, 1, 472-496.—The short exposure method was used with six subjects. The per cent of times an item was read correctly gave the legibility score, and the legibility of letters was compared with their frequency of occurrence. Most of the "no response" answers were given for characters with pronounced lightness of type face. The correlations between the results of different subjects ranged between .35 and .76. Confusion is caused by similarity in the form and area of the characters. Since confusion is greater with small letters, *t* and *l* should be used as seldom as possible in mathematical formulae. "Most of the digits fall within the group of letters having fair legibility. Most mathematical signs fall within groups of letters which are of fair or poor legibility. Factors which influence legibility of isolated characters are: (a) size, (b) simplicity or complexity of outline, (c) width of stroke and heaviness of type faced, (d) shading and hair lines, (e) area or white space included within outline, (f) emphasis or lack of emphasis on differentiating parts."—H. Cason (Rochester).

1040. Triepel, H. *Zur Frage der Bewegungswahrnehmung*. (The question of perception of movement.) *Arch. f. d. ges. Psychol.*, 1928, 64, 125-132.—Various theories of visual perception of movement are discussed which center around the problem whether the physiological processes of the stimulated end organ give rise immediately to the perception of movement or whether an additional psychic process is necessary to achieve this end. The possibility is then considered that the structure of the retina itself may contain features that further the immediate perception of movement. Such a feature is the fact that several visual cells converge upon one bi-polar cell and several bi-polar cells upon one ganglion cell. The discontinuity of the excitations of the visual cells caused by the moving object is thus overcome by their flowing together in the inner layers. Since the retina is a part of the cortex we may also assume, following Ebner's suggestion, that the image of the movement is directly created in the retina and then rises into a conscious perception by associative connections in the occipital lobes. The transverse connections in the retina are not supposed to be a factor in the perception of movement.—K. F. Muenzinger (Colorado).

1041. Truman, S. R., & Wever, E. G. The judgment of pitch as a function of the series. *Univ. Calif. Publ. Psychol.*, 1928, 3, 215-223.—The experiment consisted in presenting a standard tone of 520 d.v. per sec., after which five comparison tones

presented singly, in haphazard order, were judged as "high," "low," or "equal." The standard was presented before each group of 50 judgments. After each even-numbered group of 50 a group was interpolated in which the standard was not the midpoint of the series, as it was in the first two "normal" groups, but was equal to the lowest tone of the five in the series. The subjects were kept in ignorance of this shift. If the judgments had remained relative this would have been shown by a predominance of judgments of "high" in the group with the standard equal to the lowest comparison tone, but this was not the case. The judgments were not asymmetrically distributed but were normally grouped about the midpoint, indicating that the basis was the placement of the series, an absolute basis. The establishment of the absolute judgment basis was very rapid, being probably complete after the first 10 to 15 judgments.—S. R. Truman (California).

1042. Tusquets, J. *Crítica de la sensación*. (Criticism of sensation.) *Criterion*, 1928, 15, 369-381.—A critical examination of sensation and sensory processes is made. Questions are asked relative to the nature and reality of sensation.—J. W. Nagge (Clark).

1043. van Herk, A. W. H. *Le rétrécissement par éclairage de la pupille de l'iris isolé*. (Contraction of the isolated iris by illumination of the pupil.) *Arch. néerl. de physiol.*, 1928, 13, 534-567.—The isolated iris from diverse species of animals representing all classes of vertebrates reacts to illumination by contraction of the pupil. Various technical relationships between the absorption of light and the reaction of the pupil are worked out for *Rana esculenta*. For different parts of the spectrum the energy necessary to produce the same pupillary reaction is quite different.—C. P. Stone (Institute for Juvenile Research).

1044. [Various.] *Transactions of the Ophthalmological Society of Copenhagen*. *Acta Ophth.*, 1928, 6, 277-287.—Records of meetings and papers for discussion in the society from October, 1926, to April, 1927. Most of the papers have already been published. An unpublished lecture, by H. Ronne, bears the title *On Weber's Law*, and the following résumé: Weber's law is usually formulated as a law of sensation. It is, however, justifiable to conceive it as a law of sensitive error, denoting that the observation error percentage is constant. If a biological relation has a law-bound error, which can be mathematically defined, the relation itself must be governed by a definite law, mathematically definable. If two biologically interrelated stimuli to sensation (for instance the dependence of visual acuity upon size of letters and illumination) both follow Weber's law, it can be mathematically proved that one of these two stimuli must be inversely proportional to a power of the other. The correctness of this theorem may be experimentally controlled, and 3 confirmatory series of experiments are recorded: (1) the dependence of visual acuity upon illumination and size of letters, (2) the dependence of visual acuity upon illumination and contrast of background (Fechner's fraction), (3) the dependence of muscular contrac-

tion on the density and duration of current of the electrical stimulus (for short periods of current). The named physical pairs of stimuli are not directly dependent upon one another; that they are nevertheless biologically interrelated must be due only to the fact that both stand in a definite relation to a third quantity, i.e., the reaction of the sense organ, which they elicit in common. A consequence of Weber's law is, therefore, that there is an arithmetically formulable relation between a cell stimulus and the reaction of the cell. As between the sense cell that receives the stimulus and the brain cell that carries the sensation, a series of transmitting cell links are interpolated, which have successively received the stimulus and reacted to it, it is probable that there should exist a numerical relation between the stimulus and reaction of the transmitting cells, if there is a numerical relation between the sense stimulus and sensation. If Weber's law obtains for the relation between sense stimulus and sensation it can be mathematically deduced that the general formula for cell stimulus and cell reaction may be expressed as follows: *The stimulus is proportional to a power of the reaction.* It might seem inconsistent to reckon with a definite error in a mathematically formulable relation, but it is a matter of course that the experimental conditions in a biological experiment never can be absolutely constant. The error is due to the fact that a constant in the biological relation is not absolutely constant but ranges about the mean value. Weber's law therefore expresses the fact that the biological formula it is based upon contains exclusively factors and not terms.—*M. L. Reymert* (Wittenberg).

1045. von Gernar, E. *Raum und Zeit in der menschlichen Seele.* (Space and time in the human mind.) Stuttgart: Orient-Occident-Verlag, 1928.—*W. S. Hunter* (Clark).

1046. von Planta, P. *Die Häufigkeit der angeborenen Farbensinnstörungen bei Knaben und Mädchen und ihre Feststellung durch die üblichen klinischen Proben.* (The frequency of congenital color blindness among boys and girls, and its determination by means of the prevailing clinical tests.) *Graefes Arch. f. Ophth.*, 1928, 120, 253-281.—The author summarizes the estimates which have been made since 1912 of the frequency of congenital color blindness. These display wide differences; the estimated percentage of color blind men varies between 2.7 (Favre) and 22 (Rosmanit). The principal reason for this disagreement lies in unrepresentative sampling. All the results of the railway physicians are to be thrown out on this ground. A second variable is the method of testing. Those who have applied but a single clinical test and have not used the anomaloscope or some equivalent spectral method have necessarily missed a considerable number of cases. Statistics are lacking which show what percentage of an unselected color blind population is overlooked by the particular pigment tests, and which supplement these tests with the results of the anomaloscope. Von Planta has endeavored to fill this deficiency by a test of the public school children of Basel (2,000 boys and 3,000 girls), using the anomal-

oscope and six pigment tests. The proportion of color blind boys was found to be 7.95%, distributed as follows: 3.90% of cases of deuteranomaly, 0.35% of extreme deuteranomaly, 1.50% of deuteranopia, 0.45% of protanomaly, 0.15% of extreme protanomaly, 1.60% of protanopia. There were 0.43% of color blind girls, including 0.30% of cases of deuteranomaly, 0.03% of extreme deuteranomaly, 0.10% of protanopia. No monochromats were found. The Ishihara test was found to surpass all the other pigment tests; it apparently detects all forms of color blindness. Since this test requires very little time, it is the most suitable method for group experiments. The reliability of the other pigment tests decreases in the following order: Schaaff's *tableaux mosaïques*, Stilling's pseudoisochromatic charts, Cohn's charts for testing fine color-discrimination, Nagel's charts. A differentiation between the individual species of color blindness is not always possible with pigment tests, and never in a manner which carries certainty. For this end one must always rely on the anomaloscope. But the Ishihara test permits a differential diagnosis into a type including green blindness, extreme green anomaly and green anomaly on the one hand, and a type including red blindness, extreme red anomaly and red anomaly on the other hand. Bibliography of 41 titles.—*D. McL. Purdy* (California).

1047. Wheeler, R. H., & Cutsforth, T. D. *Synaesthesia in judging and choosing.* *J. Gen. Psychol.*, 1928, 1, 497-519.—The introspections were collected from Cutsforth by Wheeler. It was found that synaesthesia is always present in the process of judging, and that the subject also employed synaesthetic visual imagery in the act of choosing.—*H. Cason* (Rochester).

1048. Woodrow, H. *Behavior with respect to short temporal stimulus-forms.* *J. Exper. Psychol.*, 1928, 11, 167-193.—Using the method of constant stimuli 29,000 judgments of the duration of short "empty" intervals of time bounded by temporal stimuli of long and short duration were obtained from 95 subjects. The bounding stimuli were produced by means of an electric buzzer of 1,700 dv. per sec. The subjects were required to judge the length of a standard .50 sec. interval when it was preceded by a sound of short duration and followed by a sound of long duration, and when the position of these bounding stimuli was reversed. Under these conditions a marked illusion was found to exist. When the initial stimulus was long and the terminal stimulus short the interval between was considerably overestimated in comparison with an interval bounded by a short initial stimulus and a long terminal one. Controls showed this illusion to be due to the nature of the bounding sounds and not to the time order. The results were shown to be statistically reliable. The explanation given is as follows: "Long limiting sounds exert an inhibiting effect upon those processes (whatever they may be) which constitute one's reaction to an 'empty' interval. This inhibition is greater when the long sound precedes, than when it follows, the interval . . . the inhibition exerted by the long sound is greater when anterograde than when retrograde."—*N. L. Munn* (Clark).



1049. Young, P. T. Auditory localization with acoustical transposition of the ears. *J. Exper. Psychol.*, 1928, 11, 399-429.—A pseudophone, consisting of artificial pinnae and sound-proof tubes, gave the wearer a right-left reversal of audition. This instrument was worn by Young for more than 80 hours about the streets of Berlin and in the laboratory of the Psychological Institute. Two main problems were investigated: (1) what are the characteristics of sound localization with the ears transposed; and (2) does habituation bring back to normal initial disturbances in auditory localization? Nine observers in addition to the writer wore the apparatus in the laboratory. When localizations were made with closed eyes and without knowledge of the position of the source there was a consistent and unmistakable right-left reversal of the localizations. This persisted for the writer even after wearing the pseudophone 85 hours. The physical or diotic difference theories do not go far enough in seeking to account for physiological and psychological processes of localization. "Sound localization is not merely a function of the ear. It is an accomplishment of the organism as a whole involving muscle systems common to both eye and ear." Again, "Localization depends upon muscle tonus. . . . A neuromuscular set or adjustment toward the source or the total situation . . . describable as a pattern of muscular tonus." Habituation up to 58 hours did not modify auditory localizations. There was no indication that normal auditory localization could be developed by practice from the visual-auditory type; yet the reverse was developed "until indistinguishable from normal" localization. This paper contains many excerpts from protocols on features of the problem.—S. Renshaw (Ohio State).  
[See also abstracts 992, 1051, 1092, 1115, 1198, 1307, 1343, 1358.]

## FEELING AND EMOTION

1050. Denison, J. H. Emotion as the basis of civilization. New York: Scribners, 1928. Pp. xii + 555. \$5.00.—A history of civilization from a new point of view—that of determining the emotional background essential to a modern democracy. Every successful civilization has owed its success to the cultivation of certain emotions. This thesis is extended in an analysis of the organization, success and deficiencies of the great civilizations of the world, past and present. The unity of a patriarchal group is usually cultivated through religion, king and ancestor worship, and a system of mana and miasma. It is much more difficult to create a unifying emotion in a fraternal group. It is usually accomplished through the ego-maximization instinct. The Christian religion, in most respects an ideal emotional culture for a fraternal group, has in its modern interpretation one divisive feature—"the conception of a fraternal God speaking in each man and then enforcing his diverse statements by patriarchal authority." The mingling of antagonistic cultures is usually disastrous, producing a chaotic social state, as is threatened in America today. The

basis of membership in our group being merely assent to written principles, those are not excluded who by nature and training are emotionally incapable of assent to the spirit of loyalty and sense of responsibility upon which these principles are based. Democratic government can succeed only with men of one type, the Anglo-Saxon. This type is not necessarily racial, but cultural. A democracy must devise an emotional culture which will produce this type of character. "The old patriarchal and racial cultures should be cleared from the world as a pest. It is they that produce all the wars and friction." For international unity, it is important to replace the idea of brotherhood with that of cousinship. Groups of varying levels cannot be happily combined, but they may be federated with opportunity for free advancement from lower to higher levels. Democracy tends to reduce all to a lower level; anepsiarchy, to raise to a higher.—M. P. Montgomery (Faribault, Minn.).

1051. Engel, R. Experimentelle Untersuchungen über die Abhängigkeit der Lust und Unlust von der Reizstärke beim Geschmackssinn. (Experimental investigations of the dependence of pleasantness and unpleasantness upon the strength of the stimulus in the case of taste.) *Arch. f. d. ges. Psychol.*, 1928, 64, 1-36.—Heretofore, curves representing the relations between feelings and stimuli—with the exception of Saidullah's work—were not based on actual quantitative measurements. The general aim of the author was to produce such results. The judgments of the 15 subjects were limited to pleasant, unpleasant, indifferent, and questionable; they were rendered at a definite point in the rise of the sensation, numerous safeguards being used to exclude errors. Each taste quality was investigated separately; the stimuli consisted of salt (0.5-10%), quinine sulphate (0.0003-0.004%), tartaric acid (0.06-1.12%), and cane sugar (1-40%). The number of judgments of a certain kind given for a certain concentration constituted the quantitative result aimed at. The maxima of pleasantness were reached at 2% of salt, 0.0007% quinine sulphate, 0.28% tartaric acid, and 9% sugar. The percentages of the pleasant judgments at these points were 54, 24, 66, and 100 respectively, only sweet being judged uniformly pleasant at the maximum. The indifferent judgments on the whole preceded the rise of the pleasant ones, while the questionable ones occurred between the drop of the pleasant and the rise of the unpleasant ones. The former probably represent emptiness of feeling and the latter a special feeling experience characterizing the change from the pleasant to the unpleasant. The author thinks it possible that the considerable agreement of the results may be due to the fact that the subjects were students belonging to the same social stratum and that further experimentation must show whether they hold true for the central Europeans in general. 17 diagrams and 29 references.—K. F. Muenzinger (Colorado).

1052. Jones, H. E., & Jones, M. C. A study of fear. *Childhood Educ.*, 1928, 5, 136-143.—A large harmless snake was shown to children from a little

over a year to ten years of age, and they were invited to handle it. The younger group showed no fear, and with those a little older (two to six) reactions of a "guarded" type were evinced. In a class of university students two-thirds showed fear reactions up to barely controlled terror. The authors suggest as the most reasonable hypothesis that the feared object is one which is perceived as new and manifests behavior for which no appropriate reaction in the subject has been developed (corroborative experiments in which a frog was greatly feared when it jumped are cited in passing). Appropriate reactions were soon developed in the younger children and the fear disappeared, but it was apparent that some of the adult reactions were very deeply fixed.—*R. R. Willoughby (Clark).*

[See also abstract 1252.]

#### ATTENTION, MEMORY AND THOUGHT

1053. **Bauer, G.** *Synthetische Definitionsversuche.* (Experiments in synthetic definition.) *Arch. f. d. ges. Psychol.*, 1928, 62, 1-134.—This research was suggested by the work of Selz on the psychology of thought. The subjects had the task of constructing definitions of words assigned by the experimenter, and in further experiments, in which they were stimulated by questions, of improving their original definitions. A successful solution consisted in giving the proximate genus and specific difference. The author had three questions in mind: (1) How far does an analysis of the psychological conditions for a successful solution confirm Selz's theory of productive thought as a "system of specific reactions"? (2) Is it possible, by suggesting to the subject the methods of solution which analysis has disclosed, to guide him to a successful achievement? (3) Through this procedure, can one inculcate the correct operations in the subject, so that he will use them on future occasions of the same type? The methods of solution found by Selz in the case of the problem of definition were confirmed, even for the precise specification of concepts which was here demanded. The analysis of the partial operations goes beyond Selz in yielding typical modes of behavior for individual subjects. The auxiliary schemata, which were constructed so as to overcome the particular type of error committed and induce a fruitful method of solution, were in the great majority of cases able to mediate the synthetic achievement of a better definition. The effects of the synthetic procedure appear indirectly in an increased proportion of adequate solutions and a correction of errors. Its direct influence is manifest in the form of a facilitation of fruitful methods and the production of new special operations which serve as safeguards against particular errors. The improvement accomplished by the synthetic method is dependent on the degree of active co-operation supplied by the subject. Bibliography of 25 titles.—*D. McL. Purdy (California).*

1054. **Brown, R. W.** A comparative study of the "whole," "part," and "combination" methods of learning piano music. *J. Exper. Psychol.*, 1928, 11,

235-247.—In the first condition the score was played from beginning to end without stopping for correction or repetition. In the second it was divided into units and each unit was practiced an equal number of times. In the third it was played from beginning to end, but all measures where errors occurred were repeated an equal number of times. Three units differing in difficulty were used. Results show the part method to be least efficient, its inefficiency being a function of the type of score. In two units out of three the whole method was most efficient. The unit in which it was not the most efficient was the most difficult one. When the easiest score was assigned to it the combination method was most efficient. It ranked second in efficiency for the medium and most difficult scores.—*N. L. Munn (Clark).*

1055. **Cox, C. M.** Comparative behavior in solving a series of maze problems of varying difficulty. *J. Exper. Psychol.*, 1928, 11, 202-218.—67 subjects were presented 5 maze problems on a Miles double-maze. The maze pattern was the same for all 5 conditions, but the lower maze was changed in position so that in tracing the two mazes the movements would be exactly opposed, at right angles to each other, so that movement away from the subject would be matched by movement towards, etc. Time and error scores were taken. In spite of the fact that the same pattern was presented in each problem relative differences in difficulty according to the position of the lower (out-of-view) maze were found. Problem 1, in which the two mazes were in the same position, was the least difficult. The next difficult problem was 2, in which the hands always moved in opposite directions. Problem 4, in which the forward and backward movements of the hands were opposed while the side-to-side motions were alike, came next in difficulty. This was followed in difficulty by problem 3, requiring right-angle opposition in all motions. Problem 5 involved right-angle opposition as well as opposition such as is presented by the mirror element in problem 4. This problem was the most difficult. Time and error scores showed a fairly regular negative agreement. The faster worker was as a rule freer from error than the slow worker, although the latter showed a tendency to learn the problem. The imagery and other cues used by the subjects showed individual and sex differences. A combination predominantly visual and secondarily kinesthetic seemed, as shown by the subjects' reports and other criteria, most effective in solving the problems.—*N. L. Munn (Clark).*

1056. **Dallenbach, K. M.** Attention. *Psychol. Bull.*, 1928, 25, 493-512.—A somewhat detailed review of literature on this topic appearing within the past three years. 34 titles are discussed under the heads: (1) definition and ultimate nature of attention, (2) special aspects, as range, fluctuation, etc., (3) relation of attention to other phenomena, (4) technological.—*J. F. Dashiell (North Carolina).*

1057. **Elkin, D.** Über den Einfluss des Rhythmus und des Tempos auf den Gedächtnisprozess. (The influence of rhythm and speed upon memory.) *Arch. f. d. ges. Psychol.*, 1928, 64, 81-92.—More than 200 subjects learned a set of ten two-place numbers with

an average of  $5\frac{3}{4}$  repetitions. These numbers were read to them with regular intervals of 5 seconds. In order to break the rhythm of the presentation the next set contained one number out of place by 2 seconds, the third set two numbers out of place, and so on, and finally the sixth set five numbers out of place. The average number of repetitions required to learn the last five sets was  $6\frac{1}{4}$ ,  $6\frac{1}{2}$ , 7,  $7\frac{1}{4}$ , and  $7\frac{1}{4}$  respectively. The less rhythm the more repetitions were required. Exactly the same result was obtained with the visual presentation of six similar series of ten nonsense syllables each. Reproduction on the next day showed that the non-rhythmic series required more repetitions than the rhythmic ones. When both, numbers and syllables, were presented at different speeds it was found that slow presentations required a smaller number of repetitions than fast ones, twelve speeds being used in all, varying from 15 to 180 seconds per series. Relearning of the series on the next day did not show any relation to the speeds of presentation. In regard to individual differences it was found that the kinesthetic memory type was more susceptible to rhythm and less to speed than the other types. 5 diagrams and 1 table.—K. F. Muenzinger (Colorado).

1058. Holsopple, J. Q., & Vanouse, I. A note on the Beta hypothesis of learning. *School & Soc.*, 1929, 29, 15-16.—The study repeats with 11 students who were making constant automatic errors Knight Dunlap's procedure of voluntarily practicing an error in typing in the hope of correcting the error thereby; and it corroborates Dunlap's finding, the automatic errors being more readily corrected by the technique than by an equivalent amount of practice on the correct form of the words. These results are claimed to be at variance with what the oft-repeated law of exercise would lead us to expect.—H. L. Koch (Texas).

1059. Hüper, H. Über die Verwendung der Achschen Suchmethode zur Analyse der Begriffsbildung. Eine experimentelle und kritische Untersuchung. (On the application of Ach's "method of searching" to the analysis of concept-formation. An experimental and critical study.) *Arch. f. d. ges. Psychol.*, 1928, 62, 315-408.—The author gives a detailed review and criticism of the work of Ach on concept-formation as reported in his essay *Über die Begriffsbildung*. A repetition of these experiments, with certain modifications, is described. Hüper objects to Ach's conclusions, inasmuch as Ach reconstructs the course of concept-formation from the objective reactions of his subjects, under the *a priori* ascription of particular psychical processes to particular reactions. Ach's results must be judged in the light of his theoretical predisposition. Hüper shows that this theoretical stand is not correct, by questioning the subjects at the various stages of the experiment in regard to the psychological facts. In this point his experiments differ from those of Ach. The introspections go to show that in the beginning of the experiment a situation exists which belongs wholly to the psychology of perception and is entirely free from any *Aufgabe*. (According to Ach this perceptual side plays a very subordinate rôle.)

The sequence of mental events which occurs is not to be explained through determining tendencies, but rather in terms of perceptual processes. There was no genuine concept-formation in the sense of a productive accomplishment; we should rather say that certain moments existing in the perceptual situation were brought into the foreground. But Hüper sees the positive value of the Ach method in that the development of the apprehension of relations existing in a definite objective situation can thereby be precisely followed in detail. Four references.—D. McL. Purdy (California).

1060. Leisegang, H. *Denkformen*. (Forms of thought.) Berlin: de Gruyter, 1928. Pp. 457. M. 20, Lw. 22.—W. S. Hunter (Clark).

1061. MacBride, E. W. *The idea of memory in biology*. London, New York: Oxford Univ. Press, 1928. Pp. 27. \$0.35.—The tenth Earl Grey Memorial Lecture. Sensory memory consists of the impressions which are our past experiences. The physical basis of this memory is in the arrangement of the molecules and atoms of the nerve cells, and forgetting would be the decay of this arrangement. This is not done by the cells of the central nervous system; rather their function is to "press back into forgetfulness all memories except those relevant to the action called for at the moment." Supporting evidence is obtained from Driesch and Bergson. Habitual memory is exemplified by the learning of a motor habit. It is acquired by the race as well as by the individual and explains the course of evolution rationally. One of the many instances quoted is that of the blind olms, which have lost their sight by disuse, "but the power to produce perfect eyes still persists as a suppressed memory, and can be brought to the surface when the proper stimulus is applied." Recapitulation is the recurrence of old racial memories early in life. These memories are thought to be carried in the nuclear material of the cells. McDougall's experiment on the inheritance of acquired fear by rats is offered as a suggestion that sensory memory may also be inherited.—O. W. Richards (Clark).

1062. McGeoch, J. A. *Memory*. *Psychol. Bull.*, 1928, 25, 513-549.—A review of 141 titles, organized under the heads of (1) memorizing: learning curves; influence of serial position, frequency, vividness, whole and part methods, logical and rote methods, tobacco and alcohol, hypnosis, fatigue, transfer, age and sex differences, etc.; (2) retention: curve of retention, interpolated activity, association aids, influence of intelligence, age and sex differences, testimony, etc.—J. F. Dashiell (North Carolina).

1063. Netschajeff, A. *Zur Frage über Ermüdungsmessungen*. (On the question of fatigue measurements.) *Arch. f. d. ges. Psychol.*, 1928, 63, 237-248.—None of the current methods for measuring fatigue enables one to diagnose an individual's fatigue-state from a single observation. The data have always to be compared with a norm. The following considerations, however, point the way to a more direct method. Fatigue always involves a disturbance of "psychical equilibrium"; the normal proportionality between sensory and motor activity is



destroyed. This may be due to inhibition of either sensory or motor cerebral centers. Netschajeff proposes to measure the ratio of sensory and motor activity in the following fashion. A series of 12 two-place numbers is read to the subject. The total number of these which he is able to reproduce correctly is taken as a "coefficient of memory." The greatest number of consecutive numbers in the series which are correctly and consecutively reproduced is called the "coefficient of attention." Finally, the subject's speed of writing is measured, and is regarded as an index of the state of the motor processes. An average is taken between the coefficients of memory and attention; this is divided by the speed of writing, and the quotient, multiplied by 100, is described as the "coefficient of harmony." The value 100 for this coefficient represents the "harmonious" relation between sensory and motor processes. The author defends this procedure on the basis of data reported in his book *Intellekt und Arbeit* (Moscow, 1926). In the present paper he describes experiments which show that systematic physical training tends to make the coefficient of harmony gradually approach the value 100.—D. McL. Purdy (California).

1064. Oppenheim, P. *Die Denkfläche. Statische und dynamische Grundgesetze der wissenschaftlichen Begriffsbildung.* (The thought surface. Fundamental static and dynamic laws for the formation of scientific concepts.) Charlottenburg: Pan-Verlag Kurt Metzner, 1928.—Proceeding from a minimum of evident hypotheses, the essential contents of the same author's book on "The natural order of the sciences," in which a special section is devoted to psychology, published by Gustav Fisher, Jena, 1926, are presented deductively. The "thought surface" represents the long-sought-for system of relations for the entire field of logic and is governed in conformity to quantitative laws by two systems of coordinates. Thus a basis is found for the formation of every conceivable scientific concept. The static law is as follows: "Every imaginable logical position has its place on the thought surface," and the dynamic, "Logical thought signifies movement on the thought surface." A series of operations are comprehended under "logical thought," to each of which certain lines correspond in the system of coordinates, and which are very clearly defined and differentiated in this fashion, e.g., abstraction, individualization, generalization, explanation, description, striving toward system and law. Of the great number of possible practical applications the following are mentioned: an order of sciences which is rationally grounded and contains all of the sciences in its living configuration without any discontinuity, which further is clearly as neutral as possible theologically and metaphysically, and for those sciences timeless because independent of accidents. In practice it immediately brings about the settling of a great number of controversies in the individual sciences. Thus far the disputants have thought there are individual fields of science, while the apparent differences are in reality an expression of the laws governing the whole of science (the thought surface); the disputants do

not notice that they stand at different positions on the thought surface. The thought surface moreover gives a rational basis for comparative scientific doctrines and opens the way for a series of important practical problems: a rational encyclopedia of the sciences, rational psychology of thought, rational history of science, elaboration of relations to characterology, vocational guidance, brain anatomy, esthetics, epistemology, etc.—P. Oppenheim (Frankfurt a. M.).

1065. Pratt, C. C. *Experimental studies of thought and reasoning.* *Psychol. Bull.*, 1928, 25, 550-561.—A review of 46 titles brings out substantial support for three conclusions regarding the nature of thought: (1) that the sequences in a train of thought cannot be accounted for in terms of association; (2) that there are persistent contents of thought that reveal no sensory or imaginal character whatever; (3) that some selective or directive factor which as yet eludes precise description is strikingly evident.—J. F. Dashiell (North Carolina).

1066. Raup, R. B. *Limitations of the scientific method.* *Teach. Coll. Rec.*, 1928, 30, 212-226.—Three types of response to the currently recognized shortcomings of scientific method as an all-inclusive guide to life are noted: (1) blaming something other than the thinking; (2) jumping to the conclusion that since thinking is imperfect, all reason is finally inadequate and some supra-rational source of guidance must be embraced; and (3) a recognition of the necessity of re-patterning thinking for increased adequacy. Two kinds of legitimate methods of thinking are analyzed and illustrated: (1) the scientific, the criterion for which is accuracy. This is purposely depersonalized and taken out of the realm of human values by eliminating all bias. (2) Thinking toward decision and belief, which leads to more effective conduct, and proceeds by the method of weighting all possible biases in the end result. This latter sort of thinking as well as the scientific sort is highly necessary and has been neglected in favor of scientific thinking. "Human thought eventually forges out its beliefs and decisions, not in the coolers of exact science, but in the crucible of vital, interacting human desires and preferences."—H. H. Remmers (Purdue).

1067. Scheringer, E. *Experimentelle Untersuchungen über die anschaulich-motorische Kombination (praktische Intelligenz).* (Experimental studies of perceptual-motor combination (practical intelligence).) Langensalza: Beyer & Son, 1928. Pp. 112. M. 2.40.—With the aid of 12 tests, which are completely described in the work, acuity for relations is tested especially, along with acuity for individual objects. With reference to the former three kinds are differentiated according to the degree of the "combinatory moments" concerned. In the first a relation specified by the experimenter, thus unequivocally determined, e.g., similar sides, is to be sought out of a large number of figures presented. In the second some relation, not specified by the experimenter, is to be discovered in the figure present along with others. In the third an unknown relation, an unknown relation complex, is to be found

anew which satisfies the conditions of appropriateness (box test, ranking test, test of a knight at chess). The concept of practical intelligence is discussed fully. Five methods are possible in the solution of the tests: (1) immediate combination for solution, (2) logical deliberation without trying, (3) trying some possibilities chosen on the basis of deliberation, (4) systematic trying out, (5) trial and error. All possibilities are found, the third being the most frequent. The thought processes involved in the solution can be traced to the combined activity of analytic, synthetic and comparative functions. The tests employed are suited for studies made for the purpose of vocational guidance, inasmuch as the simplicity of the experimental arrangement is free from the disturbing influence of practice.—*E. Scheringer*.

1068. Seward, G. H. Recognition time as a measure of confidence (an experimental study of redintegration). *Arch. Psychol.*, 1928, No. 99. Pp. 54. —“An attempt was made to determine the extent to which speed of redintegrative response might serve as an index of confidence. A recognition experiment was set up in which the material of the test series bore different degrees of resemblance to that of the presentation series. The subject's recognition times were recorded in hundredths of a second and his confidence ratings obtained from a graphic scale. Recognition time and confidence were compared for the various situations and coefficients of correlation between recognition time and confidence computed.” The results showed marked individual differences in confidence ratings. Most cases pile up at the upper extreme, however. As a group the women make higher confidence rating than the men. The total range of recognition times extends from .30 to 60.00 seconds, with the median for men at 1.51 and that for women at 1.57 seconds. There are marked individual differences in recognition time with regard to median and to total range. The more accurate response is found to be quicker and more confident than the more inaccurate.—*E. M. Achilles* (Columbia).

1069. Tsai, L. S., & Abernethy, E. The psychology of Chinese characters. *J. Exper. Psychol.*, 1928, 11, 430-442.—An experiment “to determine the relative difficulty of learning to recognize and to reproduce Chinese characters of varying degrees of complexity.” For recognition “difficulty in learning is independent of the complexity (for characters of 3 to 12 strokes).” For reproduction the “difficulty of learning seems to increase directly with the complexity of the characters.”—*S. Renshaw* (Ohio State).

1070. Waters, R. H. The influence of tuition upon ideational learning. *J. Gen. Psychol.*, 1928, 1, 534-549.—“The purpose of this investigation was (1) to discover whether a method of tuition, effective in learning, is also effective for independent work, or, whether help while learning one problem may not be detrimental from the standpoint of independent initiative and ability in dealing with a second problem; and (2) to study the relative effectiveness of the methods in the two situations. The Demonstration Method of tuition exerts a detrimental

effect both on the subject's ability to master the first problem and also on his ability to deal with a second problem. Giving a short, concrete, easily remembered statement of the principle involved is decidedly efficacious in learning, but is only slightly beneficial in the solution of subsequent problems. Giving information as to errors and compelling their immediate correction is decidedly beneficial in learning, but has no appreciable effect on the subject's ability to deal with subsequent problems. Calling attention to the significant aspects of the problem is beneficial, both in learning and in the solution of a second problem. A short, concrete, easily remembered statement of the principle involved is more efficacious than a longer, more general or abstract one, both in the learning of the first problem and in the mastery of a second. With the three methods tried and with the intervals of delay employed, more beneficial results are obtained, both in learning the first problem and in the solution of a subsequent problem if the tuition is given at the beginning of the learning process.”—*H. Cason* (Rochester).

1071. Willwoll, A. Begriffsbildung. Eine psychologische Untersuchung. (The formation of concepts. A psychological investigation.) *Psychologische Monog.*, 1926, No. 1. Pp. xii + 148. M. 2.25.—The first part of this monograph treats in some detail of the historical background of work on the formation and development of ideas; the earliest work of this type was merely a logical analysis of the function of words. The second part treats of the factors of idea-formation which appear in the thought-psychology experiment. The goal of the experiment and its arrangement are directed first at the palpable factors in concept-formation, their character and function, and then at the symbolic factors. The observers in these experiments were all adults; hence, the new concepts which were formed were of necessity highly developed and complicated. It was found that though most O's use words, some ideas can be developed without the assistance of verbalization. The experimental evidence seems to indicate that the idea is firmly anchored “to the world of palpable images,” but that it is then freed from its chains of palpable forms and utilized according to laws and purposes peculiar to thought. “Thought is nothing less than an epiphenomenon which has primacy in what is mental.” A criticism is directed against the mechanizing of the mental, since this method leads to associative mechanisms but not to an understanding of the living connections of mental experience.—*D. E. Johannsen* (Clark).

1072. Belloni, G. [Contribution to the knowledge of nervous disintegration.] *Riv. pat. nerv. e ment.*, 1928, 33, No. 2.—The article deals with certain experimental researches performed by the author on dogs and cats. He caused aseptic, cerebral injuries in animals which had been previously deprived of certain glands of internal secretion (thyroid and sex glands). The author was concerned chiefly with the neuroglia and the connective tissue, which were examined according to the methods of Nival-Cajal and Del Rio Hortega. Belloni observed that in the process of cicatrization the most important part was

played by the connective tissue, which proliferated on leaving the pia mater and especially the parts of the vascular membrane. Proliferation of the membrane was greatest in the vessels of the white substance. Even the cells of Abrams (scavenger cells or the granulo-pigmented ones with a phagocytic function) are derived from the membrane. The true neuroglia does not proliferate; one can observe conditions of hypertrophy of certain parts only where there is no destruction of nervous tissue. The microglia (Del Rio Hortega) is hypertrophied chiefly and offers true evidence of proliferation. Substantial differences between animals deprived of their thyroid or their sexual glands and normal animals were not observed.—G. Corberi (Milan).

[See also abstracts 1093, 1359.]

### NERVOUS SYSTEM

1073. Chuang, C. H. The theory of reversibility of the sensory-motor path and its applications. *J. Gen. Psychol.*, 1928, 1, 603-607.—The author advances the hypothesis that the nervous impulse may travel from the nerve center to the sensory nerve and from the motor nerve to the nerve center. Originally the nerve current can travel in any direction. The reason it usually travels only in one direction is on account of the nature of the synapse. The final behavior of the nervous impulse is the result of learning.—H. Cason (Rochester).

1074. Hinsey, J. C., & Ranson, S. W. A note on the significance of the hypothalamus for locomotion. *J. Comp. Neur.*, 1928, 46, 461-464.—Cats were decerebrated by transection of the brain stem. When the section was made at a level extending from the rostral border of the superior colliculus superiorly to the ventral border of the optic chiasma ventrally the animal was able to get onto its feet spontaneously and walk about the room as soon as the immediate effects of the operation had passed. When the section was made below the hypothalamus, i.e., just in front of the superior colliculus and just behind the mammillary body, or farther back in the brain stem, no spontaneous righting movements or attempts at walking were made. It appears that spontaneous walking in decerebrate cats depends upon the intactness of the tegmental portion of the hypothalamus in which there are the medial and lateral hypothalamic nuclei, the nucleus proprius pedunculi, and the corpus subthalamicus. This portion of the hypothalamus is the upward continuation of the tegmentum of the mesencephalon.—C. P. Stone (Institute for Juvenile Research).

1075. Krestovnikoff, A. De l'influence de l'ablation d'une partie du cervelet sur certaines propriétés de la musculature striée. (The influence of ablation of a part of the cerebellum on certain properties of the striped musculature.) *Arch. néerl. de physiol.*, 1928, 13.—C. P. Stone (Institute for Juvenile Research).

1076. Ramon y Cajal, C. S. Degeneration and regeneration of the nervous system. (Tr. & ed., R. M. May.) New York: Oxford, 1928. Pp. 794. \$18.00.—W. S. Hunter (Clark).

1077. Rose, M. Der Inselrinde des Menschen und der Tiere. (The cortex of the insula in man and animals.) *J. f. Psychol. u. Neur.*, 1928, 37, 467-624.—Architectonic description of the cortex of the island of Reil in man, Simiae, Prosimiae, rodents, Insectivora, and Chiroptera. Suggestions as to function are made, based on morphological data. 38 double-page reproductions of sections of the material are appended.—L. T. Spencer (Yale).

1078. Weinberg, E. The mesencephalic root of the fifth nerve. A comparative anatomical study. *J. Comp. Neur.*, 1928, 46, 249-405.—Chiefly morphological as to content; however, the functional relation of the mesencephalic root of the V nerve to the masticatory muscles is established, and a similar functional relationship to the eye muscles seems probable. The proprioceptive nature of the mesencephalic root of nerve V is also probable. 35 figures.—C. P. Stone (Institute for Juvenile Research).

[See also abstracts 994, 1183, 1198.]

### MOTOR PHENOMENA AND ACTION

1079. Beall, E. Essential qualities in certain aspects of physical education with ways of measuring and developing the same. *Amer. Phys. Educ. Rev.*, 1928, 33, 582-585.—171 college women were given an agility and speed of foot test. This consisted in running 25 yards in which there were four right-angle turns. This group was then trained for ten weeks in the strokes of tennis, in receiving, and in net play. After this training they were retested on the original test. An improvement of 3/5 sec. in the median scores of the second test over the first was found.—R. Stone (Clark).

1080. Blom, E. C. Mirror-writing. *Psychol. Bull.*, 1928, 25, 582-594.—A review of 81 titles on the incidence and the probable causation of this phenomenon, also on problems of handedness.—J. F. Dashiell (North Carolina).

1081. Bray, C. W. Transfer of learning. *J. Exper. Psychol.*, 1928, 11, 443-467.—Experiments by mirror drawing and hitting a target on cross-transfer of practice from hand to hand, hand to foot, etc.—S. Renshaw (Ohio State).

1082. Büttner, H. E., & Heimbrecht, B. Über den Einfluss des Sympathicus auf den Verkürzungsrückstand des Muskels. (On the influence of the sympatheticus on the residual shortening of the muscle.) *Pflüg. Arch. f. d. ges. Physiol.*, 1928, 221, 93-103.—Elimination of the sympatheticus innervation of a limb of the frog and electrical stimulation of the muscle leads to a strengthening of the residual contracture. Since the removal of the sympatheticus causes an increase in the  $\text{NH}_4$  content of the muscle, and addition of similar concentrations of ammoniac or ammonium lactate to isolated muscle produces significant increases in the residual contracture, the dependence of the contracture on the  $\text{NH}_4$  content of the muscle is indicated.—L. T. Spencer (Yale).

1083. Cords, R., & Nolzen, L. Weitere Untersuchungen über den optokinetischen (optomotorischen) Nystagmus. (Further researches on optoki-



netic (optomotor) nystagmus.) *Graefes Arch. f. Ophth.*, 1928, 120, 506-525.—The methods for producing optokinetic nystagmus (nystagmus due to visual stimulus) are described in detail. This nystagmus is found to be a function of the velocity of the stimulus and of the degree of attention. The nature of the phenomenon in cases of hemianopsia, astereognosia and motor aphasia is described.—D. McL. Purdy (California).

1084. de Barenne, J. G. D., & de Kleyn, A. Über vestibulären Nystagmus nach Exstirpation von allen sechs Augenmuskeln beim Kaninchen; Beitrag zur Wirkung und Innervation des Musculus retractor bulbi. (On vestibular nystagmus after extirpation of all six eye muscles in the rabbit; contribution with reference to the action and innervation of the musculus retractor bulbi.) *Pflüg. Arch. f. d. ges. Physiol.*, 1928, 221, 1-14.—In different rabbits the development of the external rectus eye muscles differs in relation to the corresponding retractor processes. Cross transplantation of the horizontal rectus eye muscles leads in the majority of cases to no disturbance of the normal synchronous nystagmus in which the two eyes move together and in the same direction. The remaining cases exhibit synchronous nystagmus, but the direction of motion is opposite in the two eyes. The two types of effects are, it is suggested, to be correlated with the relative development of the external recti and the retractor muscles. After extirpation of all six external eye muscles normal horizontal and vertical nystagmus persists to vestibular stimulation. Rotary nystagmus was absent, except in one case. This persistence is ascribed to the presence of the four tips of the musculus retractor bulbi, which act as do the corresponding external recti. The two diametrically opposite tips were shown to be reciprocally innervated. The innervation of these tips is described. The importance of consideration of this auxiliary musculature in the study of eye movements is pointed out.—L. T. Spencer (Yale).

1085. Garrett, H. E., & Kellogg, W. N. The relation of physical constitution to general intelligence, social intelligence and emotional instability. *J. Exper. Psychol.*, 1928, 11, 113-129.—Morphologic indices were obtained from the photographs of 221 Columbia freshmen and these were correlated with the Thorndike Intelligence Examination for High School graduates, the George Washington Social Intelligence Test, and the Woodworth Personal Data Sheet. These tests were used as measures of general intelligence, social intelligence, and emotional instability, respectively. A simplified form of the Naccarati "morphologic index" was used as a measure of physical constitution. Height-weight indices were also obtained and correlated with the three tests. "Small and unreliable correlations ranging from .051 and .101 (for Ht/Wt) and from -.055 and .074 (for M.I.) were obtained between Ht/Wt, M.I. and the other three variables." While the correlation ratios were considerably larger than the product-moment  $r$ 's, they were not large enough to establish non-linearity of regression. The authors suggest that the correlation between Ht/Wt and social in-

telligence might be curvilinear if it were calculated from a larger and less highly selected group. They found a correlation of .42 (.52 corrected for attenuation) between the scores on the Thorndike test and those on the Social Intelligence Test. "This suggests that the latter test is, to a certain degree, a measure of intelligence." The correlation between Ht/Wt and M.I. was .81, hence the authors suggest that these two indices of physique are measures of virtually the same thing.—N. L. Munn (Clark).

1086. Goldstein, H. Rôle of the endocrines in infantilism and dwarfism. *Med. J. & Rec.*, 1928, 7, 345-351.—"Infantilism should be characterized as a syndrome of retardation or detention of development in the entire organism or in parts of it, dating from infancy or early childhood, in the persistence of the morphological characteristics proper to infancy on or before puberty." Many details are given and suggestions made with respect to metabolism and nutrition. In discussing dwarfism particular attention is laid on fetal rickets rather than on endocrine dysfunction as a cause of this abnormality. Some notice is taken of disproportionate dwarfs.—R. C. Givler (Tufts).

1087. Groebbel, F. Die Lage- und Bewegungsreflexe der Vögel. IX. Die Wirkung von Kleinhirnläsionen und ihre anatomisch-physiologische Analyse. (The position and movement reflexes of birds. IX. The effect of lesions of the cerebellum and their anatomico-physiological analysis.) *Pflüg. Arch. f. d. ges. Physiol.*, 1928, 221, 15-40.—Effects of various operative lesions of the cerebellum of the pigeon on the movement and posture of the neck, tail, wings, and rump are described and interpreted with regard to the reflex and neural conditions thereby produced.—L. T. Spencer (Yale).

1088. Groebbel, F. Die Lage- und Bewegungsreflexe der Vögel. X. Die Analyse der Beziehungen zwischen Labyrinth und Kleinhirn. (The position and movement reflexes of birds. X. The analysis of the relations between labyrinth and cerebellum.) *Pflüg. Arch. f. d. ges. Physiol.*, 1928, 221, 41-49.—Using the results reported in the previous article as a control (See III: 1087), additional lesions of the labyrinthine structures show that both labyrinth and cerebellum control the integrated tonus of the neck and wings. The effects of the ipsilateral cerebellar and labyrinthine structures seem to be opposed as to direction of movement produced. A new labyrinthine reflex is described involving turning of the rump.—L. T. Spencer (Yale).

1089. Groebbel, F. Die Lage- und Bewegungsreflexe der Vögel. XI. Die Analyse der Stützreaktion. (The position and movement reflexes of birds. XI. The analysis of the stance reaction.) *Pflüg. Arch. f. d. ges. Physiol.*, 1928, 221, 50-65.—The tonus of leg muscles in the pigeon was observed under various conditions of cerebral, cerebellar, and labyrinthine lesion. The tonus persists despite numerous lesions or anesthetics of the limb structures and certain nervous paths which are enumerated, but disappears with other types of injury.—L. T. Spencer (Yale).

1090. Hansen, W. *Über das Werden von Formen der Willenshandlung. Eine genetische, experimentelle Untersuchung.* (On the development of forms of voluntary activity. A genetic, experimental study.) *Arch. f. d. ges. Psychol.*, 1928, 63, 257-368. —The author takes his stand with Martius and Wittmann in regarding voluntary actions as products of a process of development (*Werden*), in opposition to von Bechterew (Bekhterev), who sees here only phenomena of association. A genetic study of voluntary actions is described; this took the form of a series of reaction experiments, in which introspections were taken into account. The subject had to press a key when a lamp flashed. His task was complicated by the occasional flashing of a second lamp. This second lamp appeared sometimes simultaneously with the first, sometimes in alternation with it, in variable arrangement. It was the experimenter's purpose to study the change in "form" which the voluntary act underwent in the course of a number of such experiments. He concludes that this change proceeds *via* psychophysical processes of a special kind which he calls "processes of becoming" (*Werdeprozessen*). One must distinguish between intended changes of form, which presuppose affectivity and insight, and non-intended changes, which are due to involuntary movements of attention and the accompanying change in the apprehension of perceptual relations. The form of voluntary action which is actually reached seldom agrees with the intended form. This is due to the fact that with the intention there is coupled a renewed direction of attention to the perceptual contents, which entails a differentiated cognition of them, and a bestowal of meaning on the newly grasped contents. The perceptual data are thereby apprehended as in a definite order and in a meaningful relation to the solution of the problem. 9 references.—D. McL. Purdy (California).

1091. McFarland, R. A. The rôle of speed in mental ability. *Psychol. Bull.*, 1928, 25, 595-612.—36 studies reviewed concerning speed of reaction in relation to (1) sensation and perception or other simple processes, (2) higher mental processes, (3) general intelligence or a specific ability.—J. F. Dashiell (North Carolina).

1092. Miles, C. C. A human clock. *J. Gen. Psychol.*, 1928, 1, 602-603.—This is a quotation from Friedrich Hebbel's drama, *Herodes und Mariamne*, Act 4, Scene 4.—H. Cason (Rochester).

1093. Neifeld, M. R., & Poffenberger, A. T. A mathematical analysis of work curves. *J. Gen. Psychol.*, 1928, 1, 448-458.—"The material presented in this paper is a portion of an extensive investigation of the effects of continuous functioning upon seven forms of physical work and four forms of mental work in which eleven subjects took part over a period covering a number of months. It represents an analysis of a sampling of the work curves for different individuals and for the same individual when engaged in different kinds of work in order to determine their form and to translate them into mathematical equations." In trying to express her work curves in equations by the process of curve fitting, Ioteyko found that her curves best fitted a

parabola of the third degree whose equation was  $y = a + bx + cx^2 + dx^3$ . In the present study the curve-fitting method was applied to data obtained from 9 persons who raised a 24-pound weight rhythmically at a 2-second rate, by bending the arm at the elbow. With one exception the subjects gave an equation of the form  $y = a + bx - cx^2 + dx^3$ , while Ioteyko's subjects uniformly gave an equation of the form  $y = a - bx + cx^2 - dx^3$ . "Although the third degree parabola or any other form that may be found to fit is merely an empirical fit within the limits of observation, and does not offer the basis for the discovery of the laws of fatigue, nevertheless the fitted curves supply us with the simplest description of the observed data, and facilitate comparisons with similar data."—H. Cason (Rochester).

1094. Pavlov, I. P. *Lectures on conditioned reflexes.* (Trans. by W. H. Gantt and G. Volborth.) New York: International Pub., 1928. Pp. 414. \$6.50.—The book is composed of lectures and papers, issued between 1903 and 1928, dealing with the theoretical as well as the experimental aspects of the conditioned reflex. W. B. Cannon supplies an introductory note. A 22-page biographical sketch, a description of the Leningrad laboratory, and a list of the publications from the laboratory are given.—W. S. Hunter (Clark).

1095. Renshaw, S. An experimental test of the serial character of a case of pursuit learning. *J. Gen. Psychol.*, 1928, 1, 520-533.—Three subjects were taught to pursue an electrode moving in a complex geometrical pattern. Each break in the contact with the electrode (or "error") stopped the apparatus, which functioned again when the contact was re-made. The practices were continued three times weekly until the subjects ceased to improve markedly. Then without warning to the subjects the pattern of transit of the electrode was reversed and the number of errors was again recorded. No significant difference in the performance of any subject was observed when the instrument was operated in the reversed order. The author discusses the general nature of serial learning in the light of these results.—H. Cason (Rochester).

1096. Salmon, A. [On the mechanism of automatic movements which normally follow muscular effort.] *Quad. psychiat.*, 1928, No. 3-4.—A detailed study of the phenomena and the theory of postural contraction, with an exposition of recent experimental and clinical data favorable to the spinal theory of the aforesaid contraction.—G. Vidoni (Genoa).

1097. Schlosberg, H. A study of the conditioned patellar reflex. *J. Exper. Psychol.*, 1928, 11, 468-494.—Conditioned patellar reflexes were established by pairing the sound of a single stroke bell, a buzz, a click and a tactual pressure with the striking of the tendon by a two-pound pendulum hammer. "These conditioned knee jerks have been formed in 44 out of 49 subjects." A modification of Dodge's method of measuring the thickening of the quadriceps by a muscle-lever and kymograph was used. When the interval between the two stimuli was varied between .20 and .44 seconds there was no significant

difference in the ease of conditioning, but when this interval was decreased below .11 seconds it was more difficult to form a conditioned response. Instability of the conditioned response and individual variability were observed characteristically. If voluntary clenching of the fists accompanied stimulation "conditioned K.J.'s were obtained more than twice as frequently as when no facilitating response was made." The latent period varied from .2 to .5 seconds, being about the same as that of voluntary contraction of the quadriceps and 5 to 10 times that of the unconditioned K. J. During the sittings subjects were "permitted to read or . . . to divert themselves by drawing on the cardboard screen in front of them." Details of method of each of the experiments, three tables and one figure are printed.—S. Renshaw (Ohio State).

1098. Schulte, R. W. *Die Psychologie der Leibübungen.* (The psychology of bodily exercise.) Berlin: Weidmann, 1928.—W. S. Hunter (Clark).

1099. Stetson, R. H. Motor phonetics: a study of speech movements in action. *Arch. néerl. de physiol.*, 1928, 13, 179-390.—A comprehensive analysis of the motor skills or skilled movements in the process of speech.—C. P. Stone (Institute for Juvenile Research).

1100. Travis, L. E., & Tuttle, W. W. Periodic fluctuations in the extent of the knee jerk and the Achilles jerk. *J. Exper. Psychol.*, 1928, 11, 252-258.—Records of thirty subjects who furnished good knee and Achilles jerks were studied and 5 of these subjects were selected for further experiments in which different rates of eliciting the jerks were used. "Let a jerk, the Achilles jerk for instance, elicited at a certain rate, be represented by the usual abbreviation carrying the rate of elicitation as a subfigure and let an 'equals' sign following this symbol signify the production of the stated fluctuation frequency by the given elicitation frequency. Then we have

$$\begin{aligned} K.J._7 &= 2.03 \\ K.J._{10} &= 3.05 \\ A.J._7 &= 2.20 \\ A.J._{10} &= 3.03 \\ A.J._{15} &= 5.04 \end{aligned}$$

Periodic fluctuations of the knee jerk and Achilles jerk were found to exist in normal subjects under controlled conditions of quietness and restfulness. Different rates of elicitation of the jerks produced different frequencies of fluctuation in extent of the jerks. There appears to be a tendency for a certain per cent of increase in rate of elicitation to produce a slightly greater per cent of increase in the frequency of fluctuations in extent. Regardless of the rate of eliciting each jerk, each periodic fluctuation in extent contains on the average a fraction of over three jerks." No sex differences were found.—N. L. Munn (Clark).

1101. Wachholder, K. *Die Erregungsverteilung zwischen Streckern und Beugern in der Enthirnungsstarre.* (The distribution of excitation between extensors and flexors in decerebrate rigidity.) *Pflüg. Arch. f. d. ges. Physiol.*, 1928, 221, 66-81.—Decere-

brate rigidity is characterized by the division of innervation between the flexors and extensors. The extended position of the limbs in decerebrate rigidity does not prove a unilateral excitation, but is due to the overcoming of the flexor action by the extensors for purely mechanical reasons. Explanations, supporting this view, are offered for phenomena produced by passive movements of the limbs.—L. T. Spencer (Yale).

1102. Wertheimer, E. *Verändert sich der Glykogenbestand bei der tonischen Contractur quer-gestreifter Muskeln?* (Does tonic contracture of striped muscle alter the glycogen value?) *Pflüg. Arch. f. d. ges. Physiol.*, 1928, 221, 139-143.—In 15 out of 33 cases of tonic muscular contraction a loss of glycogen by the rigid muscle, even in protracted observation periods, is not observed. In the remaining 18 cases the average loss amounted to 28%. This relatively slight loss of glycogen must at least in part be related to superposed events connected with tetanic contraction.—L. T. Spencer (Yale).

[See also abstracts 1034, 1043, 1063, 1074, 1075, 1161, 1167, 1197, 1279, 1281, 1349.]

#### PLANT AND ANIMAL BEHAVIOR

1103. Baerg, W. J. The life cycle and mating habits of the male tarantula. *Quar. Rev. Biol.*, 1928, 1, 109-116.—A report based on observations of a number of spiders in various stages of development, ranging from newly hatched individuals to fully matured adults. The life cycle from hatching to sexual maturing is eleven years, with a possible variation of one or two years. During this period a male undergoes about twenty-two molts. The male and female are indistinguishable until the last molt of the male. The mating process is described. The male appears to decline after the mating season, and does not live long thereafter. Females mature between twelve and thirteen years of age and live until at least twenty. Illustrations and list of literature.—H. S. Oberly (Pennsylvania).

1104. Fulton, B. B. Sound perception by insects. *Scient. Mo.*, 1928, 27, 552-556.—From members of two genera of katydids and one genus of crickets the tibiae bearing their auditory pegs were removed, with the result that in each group of insects the song was no longer synchronized.—J. F. Dashiell (North Carolina).

1105. Hoagland, H. The mechanism of tonic immobility ("animal hypnosis"). *J. Gen. Psychol.*, 1928, 1, 426-447.—The author describes the work of Crozier and others on death feigning and tonic immobility in animals, and considers "the quantitative relations between temperature and the durations of successively induced periods of immobility, in terms of possible theoretical interpretations and of the light which may thus be had upon specific chemical transformations within intact organisms." Further experimental data are given on the lizard *Anolis carolinensis*.—H. Cason (Rochester).

1106. Hunter, W. S. The behavior of raccoons in a double alternation temporal maze. *J. Genet.*



*Psychol.*, 1928, 35, 374-388.—A previously published research showed that the white rat could not learn a simple double alternation problem in which the correct turns were temporally spaced *r r l l*. In the present study raccoons were found able after long trials to master this problem, though unable to learn a longer one of the type *r r l l r r l l*. Two explanatory hypotheses are offered: (1) the cumulative piling up in the nervous system of retained effects of responses just made; (2) symbolic processes. The second is preferred, especially in light of the author's previous delayed reaction experiments.—*J. F. Dashiell* (North Carolina).

1107. **Kroeber, A. L.** Sub-human culture beginnings. *Quar. Rev. Biol.*, 1928, 3, 325-342.—Approaches to the original nature of culture are "first, the archaeological record; second, the ontogenetic development in the infantile human individual; and third, a comparison with those of infra-human animals most likely to manifest anticipations of cultural activity." The writer considers the last mentioned; he reviews studies of apes and discusses "cultural beginnings," and shows their responses in the impulse of play, invention, competition, destructiveness and emotion which are similar to human responses. Bibliography reference.—*H. S. Oberly* (Pennsylvania).

1108. **ten Cate, J.** Sur la production de ce qu'on appelle l'état d'hypnose animale chez la raie. (The production of so-called animal hypnosis in the ray.) *Arch. néerl. de physiol.*, 1928, 12, 188-190.—The inhibition of movement and prevention of change of bodily position alone do not produce so-called animal hypnosis in the ray. This can be done, however, by a constant and persistent pressure on a certain part of the body surface. The condition under which the hypnotic state supervenes is said to resemble that described by Pavlov as a condition accompanying somnolence in the dog.—*C. P. Stone* (Institute for Juvenile Research).

1109. **ten Cate, J.** Nouvelles observations sur l'hypnose dite animale. Etat d'hypnose chez *Octopus vulgaris*. (New observations on so-called animal hypnosis. Hypnosis in *Octopus vulgaris*.) *Arch. néerl. de physiol.*, 1928, 13, 402-406.—Upon holding *Octopus vulgaris* in the hand in such a manner that the tentacles do not come into contact with the hand or other objects a state of so-called animal hypnosis quickly follows. The characteristics of this state are more or less complete immobility, atony of muscles, and reduced reflex excitability. This characteristic state quickly passes when the tentacles are put into contact with objects.—*C. P. Stone* (Institute for Juvenile Research).

1110. **ten Cate, J.** Zur Frage nach dem Entstehen der Zustände der sogenannte tierischen Hypnose. (On the question of the genesis of the conditions of the so-called animal hypnosis.) *Biol. Zentbl.*, 1928, 48, 664-680.—Selected animals representative of almost the whole phylogenetic series have been hypnotized by the author or others. The method used is inhibition of the natural movements of the animal and stimulation of certain parts of the body. This stimulation may be either intense for a short period

or less intense for varying longer periods. The hypnotic stage differs from that of sleep, in that more or less sensory activity is present in the hypnosis. Nevertheless the author believes that the hypnosis is caused by the irradiation of conditioned internal inhibition in the Pavlovian sense and in the vertebrates is a cerebral function. In the invertebrates the explanation is more difficult but probably similar in nature, the seat of the inhibition being in the segmental ganglia. There is some review of the literature and a bibliography.—*J. F. Brown* (Yale).

1111. **Thomson, J. A.** The minds of animals: an introduction to the study of animal behavior. London: Newnes, 1927. Pp. 206.—*W. S. Hunter* (Clark). [See also abstracts 1018, 1084, 1087, 1088, 1089.]

#### EVOLUTION AND HEREDITY

1112. **Broman, O. F.** Transcendent evolution. Boston: Stratford, 1928. Pp. xii + 162. \$2.00.—An elementary discussion of the conflict between scientific theories of evolution and orthodox religious accounts of the world, a fair example of "modernism" that tries to be both pious and enlightened, an acceptance of the present facts of science with an insistence that only religion can explain such "gaps" as occur between the inorganic and the organic phenomena.—*A. P. Brogan* (Texas).

1113. **Green, C. V.** Birth and death rates of the feeble-minded. *J. Juv. Res.*, 1928, 12, 244-248.—The data used in the study were selected from field workers' reports deposited in the Eugenics Record Office at Cold Spring Harbor, Long Island, New York, and concern the 1,357 offspring of 211 feeble-minded white women whose families had been completed between 1820 and 1899. It was discovered that: (1) the birth rate among the feeble-minded women was more than 2.5 times as high as that among the married alumni of Michigan State College for a roughly comparable period; (2) there was no apparent decrease in family size among the feeble-minded from 1840 to 1899; (3) the mortality rate was no higher than that expected for the general population during the same period; (4) the number of offspring surviving to 16 years was higher in small families than in large; (5) the grade of mentality of the father probably affected slightly at most the number of children borne by his feeble-minded wife; and (6) the number of offspring more than replaced the probable parental group.—*H. L. Koch* (Texas).

1114. **Hegner, R.** The evolutionary significance of the protozoan parasites of monkeys and man. *Quar. Rev. Biol.*, 1928, 2, 225-244.—Two types of protozoan parasites are present in monkeys and man: (1) intestinal, and (2) blood inhabiting. This paper follows up the hypothesis that "two species of hosts are of common descent if they are parasitized by the same species of parasites." Lower animals are not naturally hosts to human protozoa and protozoa in lower animals of the same genera in man are readily distinguished from human protozoa. Result of study indicates that the protozoan parasites of monkeys and man belong for the most part to the

same species or are so similar in their structure, life cycles, and host-parasite relations as to be practically indistinguishable.—*H. S. Oberly* (Pennsylvania).

1115. Kiso, K. Beiträge zur Kenntnis von der Vererbung der markhaltigen Sehnervenfasern in der Netzhaut. (On the inheritance of medullated optic nerve fibers in the retina.) *Graefes Arch. f. Ophth.*, 1928, 120, 154-174.—The existence of medullated nerve fibers in the retina is an inherited anomaly. There is ground for believing that its determinant lies in the X-chromosome.—*D. McL. Purdy* (California).

1116. Komai, T. Criteria for distinguishing identical and fraternal twins. *Quar. Rev. Biol.*, 1928, 3, 408-418.—A study of palm, sole and finger prints of a number of same-sex and different-sex twins, and one set of palm and finger prints of male triplets. Illustrated with photographs, showing greater similarity of prints in identical twins than in fraternal twins. Bibliography.—*H. S. Oberly* (Pennsylvania).

1117. Lutz, A. Über 24 Fälle von physiologischer Depigmentierung beider Regenbogenhäute in gesunden Augen und 32 weitere Fälle von Heterochromia iridum. (On 24 cases of physiological depigmentation of both irides in normal eyes and 32 further cases of heterochromia iridum.) *Graefes Arch. f. Ophth.*, 1928, 120, 653-669.—Difference in color between the two eyes is a phenomenon of unilateral heredity, due to an unequal distribution of chromosomes during the formation of the germ cell.—*D. McL. Purdy* (California).

1118. Pearl, R. Evolution and mortality. *Quar. Rev. Biol.*, 1928, 2, 271-280.—In a previous work, the writer discussed the problem of human mortality on the basis of an organological classification. The discussion in this paper suggests that the present characteristics and distribution of human and animal mortality are in part, at least, the result or consequences of the evolutionary history of the body itself. A study is made of data of mortality of (1) mammals, birds and reptiles in the London Zoological Garden, 1920-23; (2) man in the city of Sao Paulo, Brazil, in 1917; (3) man in England and Wales in 1914. Tables and charts show the mortality distributions for these groups under organological classifications referred to above. Further classifies mortality on the basis of the primary germ layers, ectoderm, mesoderm and endoderm, from which the organs developed embryologically.—*H. S. Oberly* (Pennsylvania).

1119. Pearl, R. Experiments in longevity. *Quar. Rev. Biol.*, 1928, 3, 391-407.—An experimental study of mortality and longevity in flies and cantaloupe seedlings. Considers the variable factors of difference in longevity—inheritance, density of population, starvation or inherent vitality. Working with inherent vitality only in seedlings, results indicate that longevity varies inversely as the rate of energy expended during life. A further discussion of the author's interest in problem of longevity. Bibliography and charts.—*H. S. Oberly* (Pennsylvania).

1120. Popenoe, P., & Gosney, E. S. Sterilization for human betterment. Pasadena, Calif.: Authors, 1928.—*W. S. Hunter* (Clark).

1121. Werrenrath, A. C. Musical capacity in the Werrenrath family. *Eug. News*, 1928, 13, 144-145.—An account is given of a family of gifted singers. A pedigree chart for three generations behind the propositus is included.—*B. S. Burks* (Stanford).

1122. Willoughby, R. R. The survival of intelligence. *Proc. Nat. Acad. Sci.*, 1928, 14, 892-894.—The fecundity of intellectually superior groups was examined by taking a census of the number of siblings, half-siblings and first cousins of the entire membership of Clark University, together with a smaller number from other sources. For each group considered (faculty members, graduate students, undergraduates and controls) the fertility was found to be adequately higher than the minimum value required for the maintenance of the stock. Fertility and intelligence, however, were found to be negatively correlated, as indicated by a coefficient of  $-.3$ , obtained in the case of 60 students whose intelligence test scores were known.—*H. E. Jones* (California).

[See also abstract 1232.]

## SPECIAL MENTAL CONDITIONS

1123. Adler, A. Die Technik der Individual-Psychologie. (The technique of individual-psychology.) München: Bergmann, 1928. Pp. 146.—In an effort to clarify the fundamentals of the technique of "individual-psychological" treatment, so that to the uninitiated it may seem more real and less fantastic, Adler undertakes what is really a public (and published) analysis. Having been accustomed to demonstrate his method of analyzing his patients by reading the written life-history of a person unknown to him and in interpolating the comments which he would make in his own consulting room, he now publishes such a case-study. The author of this manuscript is unknown to him, but it was presented to him as the work of a gifted Viennese girl, and had been changed only in unessentials. He emphasizes the fact that the method is only a tool for the understanding of human beings.—*D. E. Johannsen* (Clark).

1124. Alexander, F. Psychoanalyse der Gesamtpersönlichkeit. (Psychoanalysis of the total personality.) Wien: Int. Psychoanal. Verlag, 1928.—*W. S. Hunter* (Clark).

1125. Besterman, T. Evocation of the dead and kindred phenomena among the natives of Madagascar. *Proc. Soc. Psych. Res.*, 1928, 38, 209-221.—There is no priestly cult among the Malagasy, but a prevalent belief in the spiritual presence of the dead, and practice of communication, with shamanistic ritual affecting large groups. The dead are held to cure disease and foretell the future. The elaborate burial systems are influenced by these beliefs. The royal succession has been controlled by them. Epidemics of shamanism are recorded for 1873, 1895, 1906 or 1907, and 1910. For detailed information, refer to: Parisot, E., Le Reveil au

Valalafotsy, J. *des Missions evangeliques*, Paris, June, 1907. Pp. 427 seq.; Pechin, E., *Le 'Bilo,' J. des missions evangeliques*, Paris, Feb., 1910. Pp. 171 seq.—F. B. Bond (Pride's Crossing, Mass.).

1126. Brachfeld, O. *Die Deutung eines Traumes in Rousseaus "Nouvelle Heloise."* (The interpretation of a dream in Rousseau's *Nouvelle Heloise*.) *Int. Zsch. f. Individual-psychol.*, 1928, 5, 374-377.—O. N. de Weerdt (Beloit).

1127. Brunswick, R. M. *A supplement to Freud's "History of an Infantile Neurosis."* *Int. J. Psychoanal.*, 1928, 9, 439-476.—This patient, who first came to Freud with a neurosis, spent four and a half years with Freud in analysis, and remained well afterward for some twelve years. Brunswick describes at length the history and course of the present illness, which led the patient to consult Freud and Freud to refer him to Brunswick for a second analysis. Freud had given him money yearly when he had become poor, and Freud's illness caused the loss of equilibrium which led to what Brunswick diagnoses as the hypochondriacal paranoia of which he has been cured for the last year and a half. The patient's hypochondriacal delusion about his nose cloaked the ideas of persecution behind it. His mother identification was shown by his womb fantasy and by the ecstasy following the operation on his nose. The second analysis brought no new unconscious material. The source of the new illness was an unresolved remnant of the transference to Freud. Brunswick's entire concern was with this remnant, due to an insufficient living through of the transference. Freud had resorted to a time limit for the first time in this case after months of complete stagnation, and was rewarded by the decisive material of the case. This means of pressure was the only way to produce a cure, but it enabled the patient to keep just that nucleus which later resulted in his psychosis. In other words, his attachment to the father was too strong. Freud did well to refer him for further analysis to a woman, because it would probably have been impossible for a man to have succeeded in such a case with such an intense homosexual transference and fear of castration.—C. Moxon (San Francisco).

1128. Burrow, T. *Die Laboratoriumsmethode in der Psychoanalyse, ihr Anfang und ihre Entwicklung.* (The laboratory method in psychoanalysis, its beginning and development.) *Int. Zsch. f. Psychoanal.*, 1928, 14, 375-386.—This group method of analysis, in which all are analysts and analyzed, aims at the discovery of social repressions that remain even in individually analyzed persons who come to group analysis. The consensus of observation in groups of four to twenty avoids the personal prejudice in the estimation of facts. This prejudice is inevitable in the relation of one analyst to one analysand, and prevents an exact analysis of social valuations and conditions as they actually are, such as group analysis makes possible.—C. Moxon (San Francisco).

1129. Crandon, L. R. G. *Phenomena of the "Margery" mediumship.* *J. Soc. Psych. Res.*, 1928, No. 442, 186-193.—13 classes of phenomena listed,

including account of psychic thumb-prints.—F. B. Bond (Pride's Crossing, Mass.).

1130. Ernst, J. R. *Dementia precox complexes.* *Med. J. & Rec.*, 1928, 8, 381-386.—Several interesting cases of the Oedipus complex and the homosexual complex with early paraphrenia are analyzed, and the value of Freud's own method of treating such cases is affirmed.—R. C. Givler (Tufts).

1131. Federn, P. *Narcissism in the structure of the ego.* *Int. J. Psychoanal.*, 1928, 9, 401-419.—See II: 1525.—C. Moxon (San Francisco).

1132. Gow, D. *Human personality and the proof of survival.* *J. Soc. Psych. Res.*, 1928, No. 442, 200-204.—Instances from his own experience of a sphere of mental contact and thought-transmission extra-personal in its scope and pointing to a sub-conscious union of individuals in a field of intelligence cosmic in its range.—F. B. Bond (Pride's Crossing, Mass.).

1133. Hampton, F. A. *Schüchternheit.* (Shyness.) *Int. Zsch. f. Individual-psychol.*, 1928, 5, 350-358. (Copied from *J. Neur. & Psychopath.*, 1927, 8, 124.)—Shyness may be based on a normal self-assertive instinct, thwarted by an exceptionally strong instinct of subordination; in contrast with schizophrenia, which is probably based on a pathologically over-strong instinct of self-assertion thwarted by a normal instinct of subordination. The schizophrenic, therefore, seems never to doubt his superiority. The conflict in shyness grows out of the fact that the individual struggles to elevate himself from a self-assumed position of inferiority and fear of defeat. Sources of the sense of inferiority are found in various real and imagined social judgments. Attention is called to various defensive means of the individual for hiding his inferiority. Fear is etymologically shown to be related to shyness. Stuttering and shyness are both expressions of inferiority, but whereas the one is comparable to a fear neurosis and characteristic of the introvert, the other is a form of hysteria more typical of the extrovert.—O. N. de Weerdt (Beloit).

1134. Hollander, B. *Methods and uses of hypnosis and self-hypnosis.* New York: Macmillan, 1928. Pp. 180. \$2.50.—The author defines hypnosis as a state of self-abstraction or passive concentration. It may be induced without suggestion, but is a state in which suggestions are readily accepted. Instead of being merely a state of sleep, the senses may be accentuated, and the intellectual and moral powers exalted. A theoretical discussion of the application of hypnosis to the treatment of bodily and mental disorders is illustrated by particular cases. The possible connections between hypnosis and such phenomena as telepathy, apparitions, clairvoyance, human emanations, human aura, and premonitions are stated. Finally, the common arguments against the use of hypnosis are refuted.—M. B. Mitchell (Radcliffe).

1135. Jacobsen, A. C. *Notes on Jay Gould.* *Eug. News*, 1928, 13, 148-152.—The boyhood of Jay Gould is examined from a psychoanalytical point of view, and his later career is interpreted on the basis of the findings.—B. S. Burks (Stanford).



1136. **Jameison, G. R.** *Mental mechanisms.* *Occup. Therap. & Rehab.*, 1928, 7, 379-386.—Mental mechanisms are the same whether dealing with the mentally normal or the mentally sick person. The unconscious aspects are considerably more extensive than the conscious. The former is defined as the "remotest corner of the back of one's mind." The escape mechanism manifests itself in day-dreaming and in numerous psychopathic cases. The mechanism of repression is often present in hysteria, where the patient represses painful memories. Where he is unable to repress fully he sometimes expresses the forbidden desire in some disguised fashion. This constitutes the mechanism of displacement. The mechanism of conversion involves changing the repressed feeling into some physical manifestation—for example, hysterical paralysis. Over-compensation is another mechanism in which, for instance, one who is afraid of confessing something will talk a great deal. In the rationalization mechanism we give a so-called "good reason" instead of the real reason, for our actions. The real reason is usually unconscious and not socially acceptable. Identification involves the patient's identifying himself with some other individual, and sharing in the latter's mistakes or successes. In projection we attribute our own excesses or faults to other persons. Regression involves thinking, feeling or acting as one did when a child.—*H. E. Burt* (Ohio State).

1137. **Jones, L. J.** *Presidential address to the S. P. R., March 14, 1928.* *Proc. Soc. Psych. Res.*, 1928, 38, Part 106.—Records personal experiences with mediums of various classes which have led in his case to an "assurance of survival."—*F. B. Bond* (Pride's Crossing, Mass.).

1138. **Jung, C. G.** *Über die Energetik der Seele und andere psychologische Abhandlungen.* (Psychic energy, and other psychological essays.) Zurich: Rascher, 1928. Pp. 224.—*W. S. Hunter* (Clark).

1139. **Laforgue, R.** *Überlegungen zum Begriff der Verdrängung.* (Reflections on the concept of repression.) *Int. Zsch. f. Psychoanal.*, 1928, 14, 371-374.—The case of a mother who denied or scotomized the death of her child by nursing a piece of wood in its place. The basis for this scotomization may have been laid in the pre-Oedipal phase when the child has to be psychically weaned from the mother who at first belonged to its ego, and now must be accepted as a piece of the outer world. The scotomization might represent the failure of the mother's attempt to repress hate, though it seems to be a successful repression of the real fact of her child's death. The term *scotomization* is used for a particular kind of successful repression, which from another viewpoint can be regarded as a failure. The situation that prevents the awareness of the fact is thus indicated; whereas the term *denial* (*Verleugnung*) seems not quite to fit the need, since it suggests a conscious psychical act.—*C. Moxon* (San Francisco).

1140. **Latham, R.** *Un aspecto de la psicoanalisis de Freud.* (An aspect of the psychoanalysis of Freud.) *Criterion*, 1928, 15, 407-417.—Many of the ethnological statements upon which Freud based his *Totem and Tabu* must be modified in the light of the

new facts and theories of the last ten years. In this work Freud cites no ethnological reference dated after 1910. Since then many of the older concepts have been totally discarded or fundamentally altered. Hence his theory of psychoanalysis, which totemism and tabu play a large part, is built on the older evolutionary doctrines which have now given way to newer theories secured by the use of the later psychological-historical method. Theories in regard to totemism have received serious modifications since the earlier works. It is now known that the totem was not an animal in the great majority of cases as was first believed. Among the Andean peoples it was commonly a celestial body, a force of nature, etc. Relatively few animals figured as totem there. Nor was totemism found to be a universal practice as earlier writers claimed. The totems of the different pueblos of different cultural levels usually varied with the occupation of each group. Among hunters the totem was generally derived from the chief animal; among fisher peoples it was generally derived from the sea; among agricultural peoples it might be an astral body or a plant. Nor in all parts was there a prohibition of killing the totem animal as earlier writers claimed. Freud connected exogamy and totemism in a causal relationship. In a majority of cases they did exist side by side, but not necessarily in a causal relationship, for many exogamous groups with no totem and *vice versa* were often found.—*J. W. Nagge* (Clark).

1141. **Lehman, G.** *Psychologie der Individualitäten.* (Psychology of individuality.) Berlin: Gebr. Paetel, 1928.—*W. S. Hunter* (Clark).

1142. **Levy, J.-M.** *Les rêves de vol.* (Dreams of flight.) *J. de psychol.*, 1928, 25, 709-712.—The author attacks Bergson's theory of dreams as it applies to dreams of flying. His own interpretation is based on changes in postural factors during sleep. Most individuals fall into a characteristic position during sleep and any unaccustomed contraction of the muscles may change the position of the body and thus lead to dreams of flight.—*N. L. Munn* (Clark).

1143. **Oslund, R. M.** *Seasonal modification in testes of vertebrates.* *Quar. Rev. Biol.*, 1928, 2, 254-270.—Parallelism between sex activity and (1) volume of particular tissue, (2) cell proliferation or (3) cytological appearance has been reported as existing. This paper presents a review of the facts from the literature. Fish, amphibia, birds and mammals are discussed. There is no constant parallelism between sex activity and interstitial cell quantity. No proof has been offered to support the proposition that cytoplasmic changes paralleling the periods of sex activity produce hormone products. There is always an abundance of germ cells, either developing or mature, immediately before and during mating—constant in all species. Germ-cell development is the only parallelism at present found between any particular testicular element and the physiological changes accompanying mating. Charts and list of literature.—*H. S. Oberly* (Pennsylvania).

1144. **Rado, S.** *The problem of melancholia.* *Int. J. Psychoanal.*, 1928, 9, 420-438.—See II: 1545.—*C. Moxon* (San Francisco).

1145. Sadger, I. *Über Depersonalisation.* (Depersonalization.) *Int. Zsch. f. Psychoanal.*, 1928, 14, 315-351.—A detailed account of an analyzed case with these conclusions: In depersonalization there is a new kind of instinct vicissitude (not described by Freud) which keeps the direction and object of the instinct unaltered, but suppresses merely the sexual feeling and later all affects and feelings. Castration anxiety and guilt feeling are exceptionally intense. Experiences in childhood and puberty are contributory factors. A constitutionally strong scopophilia and weak muscle erotism play, at least in some cases, the most important part. Often the loss of a parent in childhood seems to determine the outbreak of depersonalization. The above case was conscious of desire to go back to the mother's womb after her death. As one means to this end he developed an intense desire for sleep; as another, eye symptoms. When, to please the parents, he denied his sex feeling, he denied the existence of the world, and was unable to learn any new facts. A contributory cause seems to have been the unwise sex education he received at home.—*C. Moxon* (San Francisco).

1146. Simmel, E. *Die psychoanalytische Behandlung in der Klinik.* (Psychoanalytic treatment in the clinic.) *Int. Zsch. f. Psychoanal.*, 1928, 14, 352-370.—When the patient attends a clinic for only an hour a day, the analytic work is often disturbed and may be ruined by the attitude of relatives hostile to its success. Such cases should be analyzed while the patient stays within the clinic walls. The psychoanalytic sanatorium also gives an opportunity for the systematic psychotherapy of organic disease cases, and serves for the prophylaxis of psychoses and for the treatment of various manias and cravings. The sanatorium is always identified with the womb, the doctor and nurses with the parents. Simmel gives a detailed justification and defence of the sanatorium method of analytic treatment, with technical suggestions for the handling of difficult and dangerous cases. The transference and some extra indulgence of intra-uterine, oral and sadistic tendencies are means for the control of suicide cases and drug addicts. The addict must gradually learn to be weaned from the mother without repeating the original hate. The drug which numbs the super-ego is directed against the hated castrating mother. The persistence or return of intra-uterine fantasies indicates an attempt to escape from analytic progress or final success. By a temporary indulgence of the regressive intra-psychical flight, the patient will be kept from using the most primitive form of defence—a motor flight by which he escapes from the house and the cure. The existing relations the patient has with the outside world must be carefully upheld.—*C. Moxon* (San Francisco).

1147. Stowell, E. A. C., & Stowell, V. E. Record of experience at a display of "fire-walking" near Bombay under the auspices of a "fakir." *J. Soc. Psych. Res.*, 1928, No. 446, 278-284.—Deponent, V. E. Stowell, of the Imperial Bank of India, and another Englishman, Quinn, went through the blazing embers for a distance of 12 feet, the flames 2 or 3

feet high, without shoes and socks, and felt nothing. Stowell's white trousers were unsinged. Authenticated by H. C. Quinn, Tramway Manager, Bombay. Corroborative evidence by P. D. Mahaluxmivala, J. P., Sec. Electric Supply and Tramways Co. Other testimony as to powers of the fakir, Syed Hussein Atashi, from the British Resident of Gwalior State, and the Private Secretary to Lord Sydenham, then Governor of Bombay. Refer to *Proc. S. P. R.*, 15, 2-15; also to 35, 135.—*F. B. Bond* (Pride's Crossing, Mass.).

1148. Walker, D. F. Record of a remarkable dream, veridical in detail, of the Darlington railway collision of June 27, 1928, part synchronising nearly with time of event. *J. Soc. Psych. Res.*, 1928, No. 450, 379-387.—The dreamer identifies himself with the signalman on duty and appears to share his impressions telepathically. Correspondence and authentications as to dream forerunning public announcement.—*F. B. Bond* (Pride's Crossing, Mass.).

1149. Walker, N. Instance of a name given in automatic writing under conditions apparently precluding knowledge on part of recipient. Correspondence and verification. *J. Soc. Psych. Res.*, 1928, No. 441, 169-174.—*F. B. Bond* (Pride's Crossing, Mass.).

1150. Walsh, W. S. *The inferiority feeling.* New York: Dutton, 1928. Pp. ix + 381. \$2.50.—A popular discussion of the sources of the inferiority complex and its significance for mental health. The author offers many practical suggestions for parents who wish to guide their children past the psychological dangers of inferiorities. While the necessity of a sound body is indicated, special emphasis is laid on the importance of mental hygiene.—*W. Vaughan* (Boston University).

1151. Washburn, C. Character in two dimensions. *Relig. Educ.*, 1928, 23, 721-729.—One dimension of character is the ability to defer an immediate pleasure for one that is greater but more remote. Most individual virtues such as thrift, chastity, persistence and truthfulness come under this head. Distinct from such individual virtues are the social virtues, which give another dimension of character. Among these are altruism, patriotism, and others that show preference for social welfare. These dimensions of character are prominent objectives in religious education.—*J. P. Hylan* (Stoneham, Mass.).

1152. Willcock, M., & Craufurd, Q. C. A. The fire-walk. *J. Soc. Psych. Res.*, 1928, No. 448. (Refer to *J. S. P. R.* for June, 1928, p. 278.)—Supplementary evidence as to immunity. Discussion as to a deflection of heat rays by the human aura in certain self-induced psychic states.—*F. B. Bond* (Pride's Crossing, Mass.).

1153. Woolley, V. J. Experiments in mass-telepathy. *Proc. Soc. Psych. Res.*, 1928, 38, 1-9.—Five mental impressions broadcasted by radio. 24,659 answers received. Normal average, say 474 corrected by law of chances, where choice of one of a pack of 52 playing-cards is concerned. Answers elicit mental preferences, e.g., for aces or for odd numbers, vitiating test for telepathy. Thus Test I

(a 2 of clubs, announced as "a playing-card of unusual design") yields answers:

Club—Ace, 1,027	Diamond—Ace, 1,600
Two, 190	Two, 257
Heart—Ace, 1,821	Spade—Ace, 2,255
	Two, 241

In Test 4, also a playing-card, the average of correct guesses is not notably different, but the preference for the ace falls by about a half. Test 2, announced as a "picture" is received correctly by only five persons of the 24,659. It is a skull. But Test 3 (object not described, but it is a spray of white lilac) gives upwards of 1,000 responses of "flowers," and 704 of "skull"; but again the result is complicated by 1,394 replies of "lethal weapon." Writer concludes that the tests with the playing-cards offer no support to a telepathic explanation; but that in other tests there seems indication of a supernormal faculty on the part of a few participants.—*F. B. Bond* (Pride's Crossing, Mass.).

[See also abstracts 1085, 1108, 1109, 1181, 1185, 1193, 1210, 1243, 1250, 1260, 1277, 1353.]

#### NERVOUS AND MENTAL DISORDERS

1154. **Antonini, G., & Bravetta, E.** *Perizia medico-legale sullo stato di mente di Renzo Pettine.* (Medical-legal report on the mental condition of Renzo Pettine.) *Arch. di antrop. crim.*, 1928, 48, fasc. iv.—The two alienists report on a young matricide by the name of Renzo Pettine whom they diagnose as suffering from paranoid dementia springing from constitutional degeneracy and schizophrenia (mental dissociation). They base their diagnosis on the voluminous legal records in this case, on a year's observation of the delinquent's behavior, on a careful study of his correspondence with friends, and on a physical-anthropological examination.—*R. E. Schwarz* (New York University).

1155. **Bellavitis, E.** [A delayed cerebral abscess in a man wounded in the war.] *Giorn. di psich. clin. e tec. manic.*, 1928, No. 1-2.—A cranial wound of the frontal region healed quickly. A little later a psychopathic syndrome characterized by periods of confusion and by signs of ideas of persecution began and was accentuated 10 years later. The patient died, showing meningitis phenomena. At the autopsy a frontal abscess and purulent meninges were found.—*G. Corberi* (Milan).

1156. **Bellavitis, E.** [Mental manifestations of post-encephalitic Parkinsonism.] *Giorn. di psich. clin. e tec. manic.*, 1928, No. 1-2.—The author describes three clinical cases in which, along with Parkinson's disease, psychopathological syndromes were observed, characterized principally by defects of the will and the affective processes. The author brings out certain facts ascribable to pseudo-hallucinations.—*G. Corberi* (Milan).

1157. **Bellavitis, C.** [A contribution to the pathological anatomy of cases of chronic chorea.] *Riv. pat. nerv. e ment.*, 1928, 33, No. 3.—The work is an anatomical-clinical study of three cases of chronic chorea accompanied by dementia. Two of the cases

were of Huntington's chorea, and the third was consecutive to an acute juvenile chorea. The author concludes from these cases that it is probable that Huntington's chorea is differentiated even according to the anatomical point of view from the forms of chronic non-hereditary chorea. The former should have a predominantly degenerative character, while the latter should have a predominantly inflammatory character. The author does not admit the exclusive striate localization of chorea, having encountered deep and diffuse lesions even in the frontal and Rolandic zones; and, as to the pathogenesis of chorea, he calls attention to the possible interdependence between hepatic lesions and cerebral lesions, particularly in the corpora striata.—*G. Corberi* (Milan).

1158. **Blanchard, P.** *The value of psychometric examinations in psychiatric work.* *Neur. bull.*, 1921, 3, 370-376.—The intelligence test is important in psychiatric diagnosis, especially in borderline cases where the psychosis is very mild and hence difficult to determine. Typical case histories of delinquent children and of the legal establishment of sanity are given to illustrate its value in these fields. Certain limitations, however, apply to the use of intelligence tests in diagnosis. So far as an indication of the actual capacity of the individual is concerned, an IQ is useless during a psychosis, and of only tentative value afterward, until the emotional disturbance has subsided. A single test is not to be considered adequate for persons who are emotionally unstable (at least when the rating of the first test is within 20 points of the normal), or when the subject is emotionally aroused at the time of the examination. No IQ is to be taken as final when there is scattered or uneven distribution, or an undue discrepancy between different tests, or a failure to harmonize with the clinical picture of the case. In cases of organic illness the IQ cannot be taken as an indication of the patient's original ranking; and IQ's obtained from drug addicts (in withdrawal, or cured) depend upon the state of the subject. "The psychometric examination must always be interpreted in the light of all the other findings."—*B. F. Skinner* (Harvard).

1159. **Bollack, J., & Hartmann, E.** *Diagnostic et traitement des tumeurs cérébrales (partie ophtalmologique).* (Diagnosis and treatment of cerebral tumors, ophthalmological area.) *Rev. neur.*, 1928, 35, 949-1054.—An ophthalmological examination brings to the neurologist information of very great value as an aid in localizing cerebral tumors. The study of the visual apparatus permits by itself the affirmation of the existence of a syndrome of intracranial hypertension in harmony with the development of a cerebral neo-formation. This investigation can also ferret out symptoms showing intracranial affection of a part of the sensory-motor apparatus or of the sensory apparatus of the optic globe. There are two parts in this report: (1) The optic examination in its relations to intracranial hypertension with regard to the points which concern the diagnosis is discussed: the papillary arrest, its positive diagnosis, its objective signs for different periods, differential diagnosis when the visual functions are intact and when they are affected, the diagnostic value of the



papillary arrest, and the measure of the retinal arterial tension. This part, written by Bollack, has in conclusion a bibliography of approximately 250 works. (2) The optic examination in so far as it allows of localization of tumors is considered in the second part. In the first chapter an analytic and critical study is made of each symptom by a consideration of data furnished by an examination of visual functions: optic sensitivity, optic and palpebral motility, the pupils and their accommodations, exophthalmia, organo-vegetative modifications, and the ophthalmoscopic aspect. In the second chapter the author gives a schematic account of the grouping of symptoms which are habitually observed in the course of different localizations. He successively reviews tumors of the occipital, temporal, and parietal lobes, of the Rolandic zone, frontal, central, and basal tumors, tumors of the ponto-cerebellar angle, of the pineal quadrigeminal region, peduncular and protuberant tumors, and those of the bulbar and cerebellar regions. This part, written by Hartmann, has likewise a bibliography, which in this case contains approximately 320 references.—*Math. H. Piéron* (Sorbonne).

1160. Colucci, C. [Experimental psychology in relation to medicine.] *Studium*, 1928, 18, No. 2.—After giving a history of the evolution of experimental psychology, the author points out all that it has gotten from cerebral physiology and pathology, and he indicates the three principal lines of study which may be of interest to all branches of biological psychology: psychoenergetics, psychochemistry, and psychoanalysis.—*L. Galdo* (Naples).

1161. de Angelis, E. [Alterations in handwriting in cases of general paralysis of the insane before and after malariotherapy.] *Arch. gen. neur. psychiat. e psicoanal.*, 1928, 9, No. 2.—According to the author, alterations in handwriting are perhaps the best diagnostic signs of general paralysis. Malariotherapy has confirmed his opinion, in that he has seen changes in handwriting follow regularly the course of amelioration of different disorders caused by general paralysis, as the result of treatment for malaria.—*L. Galdo* (Naples).

1162. del Greco, Fr. [Personality and anomalies of character.] *Note e riv. di psichiat.*, 1928, 6, No. 2.—The author studied the evolution of character in schizophrenia paranoiacs who are afraid of life and are psychasthenic. They are not able to attain a mental position adequate to the moment or to the group in which they live. For this reason the author believes that the anomaly of character in these people depends upon a sort of powerlessness to subdivide their activity in meeting problems of adjustment, or, better, upon a powerlessness to arrive at some provisory unification, mobile or rendered stable in the long run, and to maintain this unification. According to the author, sympathetic or egoistic emotivity contributes very much to character alterations.—*L. Galdo* (Naples).

1163. de Nigris, C. [The relation of epidemic encephalitis to the character and ethics of the individual.] *Arch. gen. neur. psychiat. e psicoanal.*, 1928, 9, No. 1.—Epidemic encephalitis profoundly

disturbs the personality of persons affected by it and impairs their character in direct proportion, according to its seriousness and to the earliness of the age at which the individuals have been afflicted. In addition it brings about or aids the appearance of serious obsessive syndromes.—*L. Galdo* (Naples).

1164. Epstein, J. Minor neuroses in childhood. *Med. J. & Rec.*, 1928, 7, 354-356.—This article treats of habit spasms, nodding spasms, cerebral spasms, psychic spasms, crying spasms, gastro-intestinal spasms, respiratory spasms, cardio-vascular spasms, urinary spasms, thumb sucking, nail biting, dirt eating, and masturbation, and recommends an early diagnosis, treatment by proper drugs, and suitable hydrotherapeutic measures, so as to prevent the child from drifting into the more serious neuroses of adult life.—*R. C. Givler* (Tufts).

1165. Fittipaldi, A. [A contribution to the knowledge of psychopathic syndromes due to the absence of compensation.] *Arch. gen. neur. psychiat. e psicoanal.*, 1928, 9, No. 1.—Three cases of dementia praecox accompanied by autism were studied. The author concludes that certain individuals exist who, by their mental incapacity to have ideo-affective impulses, present two fundamental morbid syndromes: (1) dementia or imbecility in relationships, when the social conduct shows a complete failure in will and power of realization; and (2) compensation syndromes (Nathan) or syndromes due to a lack of compensation in which there is a disequilibrium between affective tendencies and affective realizations which are psychologically compensated for by a clear-cut mental malady.—*L. Galdo* (Naples).

1166. Glassburg, J. A. What price stuttering. *Survey*, 1928, 61, 363-365.—The evil effects of stuttering and the methods of treatment are outlined. Several cases are cited.—*D. Grauer* (Chicago, Ill.).

1167. Golob, M. Chronic fatigue intoxication—a definite clinical entity. *Med. J. & Rec.*, 1928, 10, 503-506.—Fatigue is not only a serious handicap to physical and mental effort, but it "has a larger share in the promotion or transmission of disease than any other single causal condition." Two main types are distinguished: acute fatigue, subdivided into physiological, arising from overexertion, and symptomatic, preceding the invasion of an infectious disease; and chronic fatigue, also subdivided into basic fatigue, symptomatic of organic disease, and essential fatigue, or chronic fatigue exhaustion without discernible organic pathology. It is the chronic fatigue intoxication that is often confused with the symptoms of organic disease, and which is due to the retention of such substances as creatin, sarcosine, acid, monopotassium phosphate and carbon dioxide. This form is widespread. Rest and relaxation are the only known cures.—*R. C. Givler* (Tufts).

1168. Gordon, A. Diagnostic consideration of the older and later views on aphasia based on the anatomical findings of a case of typical motor aphasia. *Med. J. & Rec.*, 1928, 11, 564-567.—The author denies Marie's contention "that the division of aphasia into motor and sensory is no more tenable, that there is only one aphasia, that there are no special centers

for word deafness and word blindness, that the latter are due to an intellectual deficit which accompanies all forms of aphasia ranging from a single slowness of normal functions to a total suppression of all the faculties, that Broca's region plays no part whatsoever in the function of speech, and that the area involved in aphasia occupies the so-called lenticular zone." The case of a patient having pure motor aphasia without anarthria, and maintaining the integrity of inner language, is cited specifically. Autopsy revealed that Broca's original center alone was diseased, showing that "the disorder was purely motor without any admixture of manifestations of sensory aphasia."—*R. C. Givler* (Tufts).

1169. **Gouzien, P.** *L'Assistance psychiatrique et l'hygiène mentale aux colonies.* (Psychiatric assistance and mental hygiene in the colonies.) *Prophyl. ment.*, 1927, 3, 304-313.—Since most tropical psychoses are the result of toxic infections, great care should be taken in selecting men mentally and physically strong for service in the colonies. By constant forced associations with the natives, the mental states of the latter may be imitated. Europeans in the colonies who are victims of disease and incurable in the tropical climate should be sent home with special attendants. Infected natives should be segregated and treated. From the standpoint of mental hygiene, the prevention of infectious diseases causing psychoses, alcoholism, and syphilis is of primary importance.—*M. B. Mitchell* (Radeliffe).

1170. **Gundersen, P. G.** *Craft and personality in the treatment of mental disorders.* *Occup. Therap. & Rehab.*, 1928, 7, 395-400.—The atmosphere of the occupational therapy shop sometimes changes an introvert into a temporary extrovert. Conversely, an unfavorable condition may have the opposite effect with the extrovert. The occupational therapist should know something of sublimation, compensation, conversion, rationalization, and the other Freudian mechanisms. The use of a craft in the treatment of mental disorders cannot be prescribed with the precision of a drug. It depends more on the personality of the patient than upon the craft itself. The author suggests a number of books which psychotherapists ought to read.—*H. E. Burr* (Ohio State).

1171. **Hinsie, L. E.** *The relation of exogenous factors to the onset of general paralysis.* *Psychiat. Quar.*, 1928, 3, 435-443.—The incidence of exogenous factors as precipitating causes in the production of symptoms of general paralysis, as variously estimated by several investigators, is discussed. The author states that although syphilis is a prerequisite there must be syphilis in addition to some other factor or factors in the human system to account for the development of the mental disease. He quotes Osnato as reporting a case in which the trauma was emotional. Other cases noted lead to the conclusion that factors resulting in lowered body resistance, whether the agent be psychogenic or somatogenic, may in some manner set the latent paralytic process in motion. In a study of 138 carefully selected female patients causative relationship to the onset of general paralysis was established in only three cases.

In two the onset was conditioned by physical trauma and in three by psychical states.—*E. T. Burr* (Vocational Adjustment Bureau).

1172. **Judes, —, & Trabaud, —.** *Hémiplégie gauche avec anarthrie. Accès de fou rire contrastant avec la correction de la mimique douloureuse.* (Hemiplegia of the left side with anarthria. Outbursts of foolish laughter forming a contrast with the correction of dolorous mimicry.) *Rev. neur.*, 1928, 35, 725-728.—An observation was made on a right-handed patient afflicted with left hemiplegia accompanied by aphasia. The cerebral lesions appeared unilateral and profound. There were outbursts of foolish laughter which were very frequent, inextinguishable, and recurrent, yet which did not have the spasmodic and explosive character found in the pseudo-bulbar cases. The patient tried, moreover, to stop this laughter by putting into his mouth a piece of cloth which he kept constantly in his hand for this purpose. In this patient a decided mollities of the right Sylvian fissure explains the total left hemiplegia without hemi-anesthesia and with anarthria. There was also a right unilateral lesion of the pyramidal and genicular fascicles in the sub-cortical paracapsular area. The outbursts of laughter can be accounted for by the mal-functioning of the psychic fascicle of Brissaud, which passes, as do the pyramidal and genicular fascicles, through the internal capsule, while the act of placing the bit of cloth in the mouth indicates a possible lesion of the grey nuclei which limit the zone of Foix and Lévy as being the source of certain ties.—*Math. H. Piéron* (Sorbonne).

1173. **Keister, B. C.** *Mental diseases viewed and treated from various angles.* *Med. J. & Rec.*, 1928, 11, 569-572.—The author surveys the plethora of mental diseases in the United States, laying particular emphasis upon the chief forms of dementia precox, and suggests that they should be regarded from the three angles of heredity, environment, and education.—*R. C. Givler* (Tufts).

1174. **Koseki, K.** *A cause of peculiar development of abnormal children.* *Shakai-jigyo Kenkyu* (Studies in Social Service), 1927, 15, No. 9.—A case history of six boys who developed into abnormal children after a cure of encephalitis lethargica is given in full. These boys were normal physically and mentally before the attack of encephalitis. They had sweet dispositions and were gentle and obedient in manners. The attack came in the important period of their early development. No detectable mental deterioration was noted after the attack. But temperamentally there was a marked change; they became easily excitable; when angered they were seized with extreme violence; general behavior became aggressive and abusive. They produced also selfish and egoistical tendencies. They began to steal, lied on all occasions, and at times manifested sexual aggression. The sense of shame and decency was totally lost. Physically they showed characteristic eyes, pupils, facial expression, and limbs of an encephalitic patient. These temperamental changes were most probably due to the loss of control over primary emotions and will by permanent injury to

the centers in the brain.—*J. G. Yoshioka* (Institute for Juvenile Research).

1175. **Kronberg, A., & Sternberg, E.** *Der gedankliche Aufbau der klassischen Aphasieforschung im Lichte der Sprachlehre.* (The logical structure of the classical aphasia investigation in the light of the theory of speech.) *Psychol. u. Med.*, 1927, 2, 254-295.—The classical doctrine of aphasia regarded speech as motor activity and sought to explain all disturbances of speech in terms of its neuro-motor mechanism. Actually, speech is more than sound production. The essence of speech is the intelligible expression of meanings. Disturbances of speech cannot be fully understood without reference to the data of logic, epistemology, philology, rhetoric, and grammar. The real problem of speech is the problem of objectively adequate expression of objective meanings. The author analyzes the relations between expression, meaning, and object, the general laws of speech (including style), and the psychological factors involved in the use of speech. The classical investigation of aphasia selected from the great mass of disturbances of speech a single group. In describing these, empirical and theoretical tendencies were mixed. Description of so-called aphasic symptoms often occurred deductively from the logical schema. This schema rested upon several unproved psychological dogmas: (1) the mechanistic view of psychic phenomena, (2) the psychic reflex arc, (3) the dogma that psychic processes are the sum of elements, and (4) psychophysical parallelism. Without discarding the great contributions of the classical investigators, new investigators must erect a new logical structure, more adequate to the complexity of the problem of speech.—*M. F. Martin* (West Springfield, Mass.).

1176. **Land, T.** *Psychiatric social work.* *Occup. Therap. & Rehab.*, 1928, 7, 407-412.—Psychiatric social work is an evolution from general social work and emphasizes still further the personality difficulties of the individual. A careful investigation of life history and social treatment form part of this type of work. The social investigation helps determine the validity of the patient's stories, throws much light on his present break-down and may also contribute material of research interest. In addition to preparing the patient to meet the world the psychiatric social worker must help the world meet the patient. Employers and friends must have a new understanding as to the nature of the disease, and any former bitterness of relatives who blame the patient for conduct beyond his control must be rectified.—*H. E. Burt* (Ohio State).

1177. **Lattes, L.** *Le alterazioni della personalità morale e sociale da infortunio del lavoro.* (Alterations of the moral and social personality caused by labor accidents.) *Arch. di antrop. crim.*, 1928, 48, fasc. iv.—The author sets forth the deterioration of character and conduct, which may go together with absolute or relative integrity of the intellect, caused by labor accidents resulting in cerebral lesion, concussion, or infection. This ethical-social deterioration may be merely non-social, that is, manifesting itself in aversion to steady work, indifference

to the future, lack of initiative, irritability, tendency towards alcoholism; or it may become even anti-social, that is, manifesting itself in gross sensuality, brutality, deceitfulness, and criminality.—*R. E. Schwarz* (New York University).

1178. **Levi, L.** [On the ethical decay in children following lethargic encephalitis.] *Quad. di psichiat.*, 1928, No. 5-6.—In the determination of moral decay in children afflicted with lethargic encephalitis, the author sees a real symptom of the disease, although the concurrence of a predisposed endogenic factor cannot be excluded.—*G. Vidoni* (Genoa).

1179. **Magni, L.** [Infantile encephalopathies.] *Riv. pat. nerv. e ment.*, 1928, 33, No. 2.—According to the author all the clinical forms of infantile encephalopathy, for want of etiological and anatomical criteria, can be placed in four groups characterized by the dominant neurological symptom: (1) the group of pareto-spastic forms, (2) the group of acineto-hyperpietic forms, (3) the group of mixed paretic forms, and (4) the group of mixed pareto-acineto-hyperpietic forms. The author emphasizes the fact that his grouping should be considered only provisional, since it neglects completely the psychological symptoms.—*G. Corberi* (Milan).

1180. **Martz, E. W.** *Results of blood Wassermann tests on 618 aments.* *J. Juv. Res.*, 1928, 12, 225-229.—618 children (344 boys and 274 girls) admitted during one year to the Institution for Feeble-Minded at Columbus, Ohio, were given blood Wassermann tests. (1) The incidence of positive Wassermanns in the group was 14%. (2) 11% of the cases had congenital lues. (3) The incidence of the disease in each of its forms was higher in the case of the girls than the boys. (4) Congenital lues was more frequent among the idiots and imbeciles than among the higher-grade defectives, although when all forms of the disease were grouped together, the infection total was relatively greater for the latter. (5) Congenital syphilis was much more common in the children under 16 years of age than in those over 16, whereas acquired syphilis was almost totally absent in the younger group.—*H. L. Koch* (Texas).

1181. **McCartney, J.** *Epilepsy among the Chinese: with the analysis of a case.* *Psychoanal. Rev.*, 1929, 16, 12-27.—The epilepsies are very common among the Chinese. In a previous study the author found at least 31,000 cases in that country. A case study is made of a Chinese woman, twenty-six years of age, of a good family, whose case was diagnosed as epilepsy. Analysis revealed that inability to make a successful sex adjustment in her married life was a leading cause of the disorder. A change in environment with the sympathetic aid of the husband has evidently wrought a cure, since there have been no epileptiform seizures in over a year.—*J. W. Nagge* (Clark).

1182. **Minkowski, E., & Tison, M.** *Essai sur la structure des états de dépression presbyophrénique.* (The structure of states of presbyophrenic depression.) *J. de psychol.*, 1928, 25, 696-708.—The authors believe that a series of symptoms derived from



a case study presented in this article may be united into a common frame and be known as a "centrifugal syndrome." The syndrome in question is closely allied in structure to the "feeling of growing old" which is an essential phenomenon of normal life. Certain differences between the two states are pointed out. A comparison of one state with the other on the basis here suggested would determine the gravity of the trouble being studied.—N. L. Munn (Clark).

1183. Mondio, G. [Alimentation and the brain.] *Ann. dell'Osped. psichiat. di Messina*, 1928, No. 1-2.—Mondio believes that the constitutional element predominates in mental diseases, and that on that account unwise alimentation produces directly and indirectly numerous injuries in the brain. The activity of hygienists has here a very large field for work in hygiene and mental prophylaxis.—G. Vidoni (Genoa).

1184. Morselli, E. [Mental automatism.] *Quad. psichiat.*, 1928, No. 1-2.—The author, in discussing the syndrome of Clérambault, explains his idea of psychopathology. He concludes that the latter is not a "philosophism," as certain persons still believe, but, properly defined, is a clinical matter which ought to be verified by thought.—G. Vidoni (Genoa).

1185. Morselli, A. [Psychosexual complexes in the development of neuroses.] *Quad. psichiat.*, 1928, No. 7.—The author points out the importance of psychosexual traumata, experienced at different ages, in the mechanism of neuroses. At the same time, however, he emphasizes the value of the constitutional elements in a consideration of the entity and composition of the sympathetic endocrine system.—G. Vidoni (Genoa).

1186. Muskens, L. J. J. *Epilepsy: comparative pathogenesis, symptoms, treatment.* (Foreword by Sir Charles S. Sherrington.) New York: William Wood, 1928. Pp. 430. \$8.00.—The contents of this book can be summed up best by quoting the author's own words: "The first part of this book deals mostly with the physiological problems involved in epilepsy, the second part with anatomo-physiological research, while the third or clinical part is based on long experience, many cases having been followed up for twenty years and more."—K. M. Bowman (Boston Psychopathic Hospital).

1187. Patterson, H. A. *Some observations on the intelligence quotient in epileptics.* *Psychiat. Quar.*, 1928, 3, 542-548.—The author and his assistants conclude from their study of a number of epileptics whom they tested and re-tested that the IQ varies considerably in the epileptic, and that the variation may involve either a rise or a decline in score. The variation seems to be independent, usually, of seizure frequency or severity or of medication. Great individual variation is shown in the rate and extent of deterioration found. Moreover, the variation may occur at any mental level. There should be further study of the subject.—E. T. Burr (Vocational Adjustment Bureau).

1188. Peri, A. [The curative power of work.] *Realtà*, 1928, No. 3.—The author proposes the name

aschesitherapy for the work treatment, indicating the beneficial effect of exercise. He shows its biological and psychological applications.—G. Vidoni (Genoa).

1189. Pollock, H. M., & Malzberg, B. *Expectation of mental disease.* *Psychiat. Quar.*, 1928, 3, 548-579.—The study is an attempt to show the expectation of mental disease in New York State, not only at birth but at every age of life. The life table method of analysis has been used and the data segregated by sex and nativity. This is apparently the first effort to produce standard, combined life and disease tables. The data regarding mental disease have been derived from individual statistical schedules of first admissions prepared in the state hospitals and licensed institutions for mental disease in New York State. The data of this study emphasize the seriousness of the problem of mental disease. It appears that approximately 4.5% of the persons born in the State of New York may, under existing conditions, be expected to succumb to mental disease of one form or another, and become patients in hospitals for mental disease. That is, on the average, one person out of every 22 becomes a patient in a hospital for mental disease during the lifetime of a generation. Many tables and charts are used to demonstrate the conclusions drawn.—E. T. Burr (Vocational Adjustment Bureau).

1190. Prinzhorn, H. *Methoden, Leistungen, Wertungen. Glossen zu den neueren Diskussionen über Heilkunst und Wissenschaft.* (Methods, performances, and evaluations. Comments on the new discussions about healing and science.) *Psychol. u. Med.*, 1927, 2, 81-100.—Between 1900 and 1925, there has been a shift of theoretical and practical interest from the mechanical to the functional and organic, from the anatomical to the structural, from the static to the dynamic, from the cellular-pathological to the secretory-humoral, from the natural and causal to the psychological and meaningful. In 1900, the principal currents of investigation were the anatomical-histological, the experimental-psychological, and the bacteriological-serological. Since then, scientific recognition has been accorded to the study of the hereditary constitution in relation to the chemistry of internal secretion and to general biology. The problem of the person or individual, always the object of medical practice, now appears suddenly as an object of medical thought. The human individual is the point of departure and the end goal of anatomical, physiological, histo-pathological, bacteriological, serological, and pharmacological abstractions. Yet the effort to study personality, as such, has precipitated a fierce strife among investigators. Psychiatry, in 1900, was still fairly united. Today it is split into several rival schools which scarcely understand each other, and are effectively set against mutual understanding. Nowhere, under the fiction of pure objective knowledge, is evaluation more naively personal. In the name of exact objective tradition, psychoanalysis, phenomenology, and other new lines of thought are opposed by those who do not take the trouble to try to understand them. Psychotherapy is denied outright by those who have a vital interest in denying it. Never-

theless, psychotherapy is effective for certain patients when practised by those who have a natural aptitude for it. New methods and new concepts in psychology are necessitated by the fact that the traditional experimental psychology is not adequate to the concrete problems of the physician. Prinzhorn deplores the tendency among guardians of tradition to denounce as unscientific any methods which threaten to call in question their own dogmas. He shows by concrete instances that fallacious theories have sometimes passed under the sanction of exact investigation, when their empirical basis was due to errors and artifacts. He pleads for open-mindedness as to the scope and possibilities of the new science.—*M. F. Martin* (West Springfield, Mass.).

1191. Roncati, C. [On the therapy of certain mental diseases.] *Giorn. di psich. clin. e tec. manic.*, 1928, No. 1-2.—The author reports two cases of schizophrenia in which the presence of pulmonary tuberculosis caused a decisive psychological amelioration. The author considers this fact to be in opposition to the theories according to which schizophrenia should have a tubercular origin. Roncati made certain tests with different piretogenic methods (malaria excepted) in general paralysis. He obtained certain results with phlogetan. In schizophrenia he obtained a good number of remissions with a mixture of tuberculin nucleinated with soda and glycerine. In the manic-depressive psychosis, on the contrary, he obtained no amelioration.—*G. Corberi* (Milan).

1192. Rossolimo, G. I. Quand et comment faut-il prévenir les maladies du système nerveux? (When and how can nervous diseases be prevented?) *Prophyl. ment.*, 1927, 3, 314-323.—Since the functioning of the nervous system depends upon energy derived from metabolism, the body should not be overtaxed by too strong emotional excitations, too much work especially of a mental type, or by too great strain in an effort at intellectual creation. The innate predispositions to nervous troubles are classified. The author believes that these diseases are being lessened by the prevention of typhoid fever, diphtheria, alcoholism, and sexual excesses. At certain age crises of biological development, the child must be watched for psychopathological constitutional developments. The author believes that the solutions to all the difficulties met in preventive work have not yet been found, but that the biological and experimental sciences will eventually find them.—*M. B. Mitchell* (Radeliffe).

1193. Schilder, P. Introduction to a psychoanalytic psychiatry. (Trans. by B. Glueck.) New York & Washington: Nervous and Mental Disease Publishing Co., 1928. (*Nerv. & Ment. Dis. Monog. Ser.*, No. 50.) Pp. ix + 178. \$3.50.—Aims to bring together previous psychoanalytic studies of the psychoses and to define problems rather than to solve them. A critical analysis of such concepts as the ego instincts, the ego ideal, narcissism (at various levels), the relation of the ego to the perceptive self (integration through identifications), and repression. Study of the psychologic factors involved in general paresis is facilitated by having patients re-

peat some very simple stories, the same story being told to the patient as he was requested to listen and to repeat it. Some of these experiments lasted over periods of considerable improvement through malarial infection. Repressive mechanisms are studied in hypochondria, schizophrenia, and depressions. "Indiscriminate use of the raw material of experience in schizophrenia" is found to follow from the absence of an ego ideal. In schizophrenia also "the points of fixation lie partly in the region of narcissism and partly in more primitive phases of development" (p. 70). In discussing the relation of personal make-up to paranoia there is found a possibility of "equivalence of mental and physical conditions" in Freud's sense (p. 93). Case histories are used freely by the author to point his trends. As an instance, a depressed, anxious and self-condemning manic-depressive, whose mother had a pronounced circular psychosis, manifests strong cannibalistic impulses and a really monstrous sadism. The sadism is definitely oral. It is also probably anal. The guilty self has grown to a giant. It has not killed the capacity for pleasure. "Pleasurable experience is denied the individual from the side of an over-rigid ego ideal" (p. 138). A bibliography (mostly German) is attached.—*T. H. Haines* (New York City).

1194. Souques, A., & Barak, H. Hallucinations lilliputiennes au cours d'une tumeur de l'hypophyse. Interprétation de ces hallucinations. (Lilliputian hallucinations during the course of a tumor of the hypophysis. The interpretation of these hallucinations.) *Rev. neur.*, 1928, 35, 75-88.—The authors describe the case of a 45-year-old woman who possessed a well localized hallucinatory condition, a syndrome of unilateral Lilliputian hallucinations in the field of hemianopsia during the course of a hypophyseal tumor. The question was one of a pure hallucinatory state, for the patient always had a clear consciousness of the pathological nature of her troubles, which she attributed to the bad condition of her eyes. The authors thought that the starting point of this state was in an excitation of the optic nerves at the chiasma level. This excitation was transmitted to the occipital visual centers, which elaborated it and transformed it into figures and persons by virtue of association with the temporal lobes, the centers of intellectual association and memory phenomena. It is possible that the Lilliputian character can be explained by the awakening of memories of infancy, at a time when the child was interested in dolls.—*Math. H. Piéron* (Sorbonne).

1195. Stefani, S. [Statistical notes on 100 cases of epidemic encephalitis.] *Giorn. di psich. clin. e tec. manic.*, 1928, No. 1-2.—The article summarizes certain cases of epidemic encephalitis, 1919-1921, observed in the provisional hospital of the psychiatric clinic in Rome (Prof. Mingazzini). The following initial symptoms appeared: fever in 50% of the cases; violent head-aches 70%; palpebral ptosis, 28%; diplopia, 40%; strabismus, 5%; paresis of the ocular muscles, 36%; nystagmus, 19%; myoclonia, 47%; lethargy, 41%; insomnia, 30%; neuralgia and myalgia, 29%; asthenia, 30%; simple

confusion, 5%; visual hallucinations, 9%; auditory hallucinations, 10%; without other mental symptoms, hallucinatory psychosis, 12%. The following were secondary symptoms: derangement of the motility of the muscles of expression (paralysis excluded), 74%; trophic and motor disorders of the tongue, 49%; the same for the uvula and the thick palate, 11%; dysphonia, 11%; bradylalia, 12%; bradyarthria, 6%; balbuties, 4%; true dysarthria, 5%; flow of saliva, 8%; paresis or paralysis of the limbs, 11%; asthenia of the limbs or the trunk, 22%; augmentation of the rotulian reflexes (knee jerk), 78%; absence of these reflexes, 10%; augmentation of abdominal reflexes, 12%; their absence or diminution, 6%; anisocoria, 18%; pupillary rigidity, 8%; Argyll-Robertson pupil, 6%; disorders of the motility of the iris, anosmia and hyposmia, 5%; disorders of hearing, 5%; vomiting, 4%; hiccough, 1%; polyphnoea, 6%; bulbo-pontine syndrome, 1%. Symptoms of cases evolved in the Parkinsonian sense (no indication of number): exaggerated rotulian reflex, 50%; trembling, 45%; hypertonicity, 41%; bradykinesia, 34%; asthenia, 30%; disorders of equilibrium and of bearing, 20%; dysphonia, 16%; bradylalia, 13%; ataxia, 10%; bradyarthria, 7%; marked emaciation, 4%; apathy and abulia, 36%; bradypsychism, 29%; mental torpor, 19%; abnormal irascibility, 3%. Symptoms not evolved in the Parkinsonian sense were: maniacal agitation, 15%; apathy and abulia, 13%; mental torpor, 15%; memory disorders, 3%; bradypsychism, 3%; and ethical perversion, 1%.—*G. Corberi* (Milan).

1196. Salmon, A. [Pathological sleep in cases of cerebral tumor.] *Cerv.*, 1928, 6, No. 4.—Just as excessive sleep and attacks of narcolepsy constitute the important signs in a diagnosis of infundibular and hypophyseal tumors, so the tendency to sleep that is noted in the initial phase of a cerebral tumor allows us to infer a frontal localization. This is true all the more when the aforesaid tendency to sleep is accompanied by a limiting of the individual's interest in and attention to his environment, as well as by mental disorders.—*L. Galdo* (Naples).

1197. Sternberg, E. Zur Frage nach der klinischen und funktionellen Bedeutung der Bewegungsstörungen bei Geisteskranken. (On the question of the clinical and functional meaning of disturbances of movement in the mentally diseased.) *Psychol. u. Med.*, 1927, 2, 143-148.—A discussion of Kronfeld's attempt to explain motor disturbances functionally, regardless of their clinical origin. Certain disturbances of movement are relatively constant in their symptomatology, though they may appear in connection with mental diseases of diverse origins. These dyskinetic phenomena, not being specific for the diseases in which they occur, are not to be explained in terms of these diseases. Kronfeld interprets them as disturbances of the *Antrieb* (impulse), the elementary psychic component of the motor mechanism—not to be confused with the *will*. Sternberg compares Kronfeld's theories with those of Wernicke and Pohlisch. He finds an apparent confirmation of Kronfeld's theories in a group of observations by Lange. A patient and her mother,

sister, and cousin all suffered from similar motor disturbances, though the etiology of their mental diseases was different in every case. Another patient and her sister and uncle also suffered from strikingly similar motor disturbances, though their troubles were of different origin. A similar case by Schwarz is also cited.—*M. F. Martin* (West Springfield, Mass.).

1198. Tilney, F. A. A comparative sensory analysis of Helen Keller and Laura Bridgman. *Eug. News.*, 1928, 13, 156-162.—Using G. Stanley Hall's data upon Laura Bridgman, and his own data upon Helen Keller, the author compares the sensory acuity of these two blind-deaf women for various stimuli. He concludes that Miss Keller's superiority lies not in her sensitivity for afferent impulses (which is not above average), but in her richness of association. Expressing the opinion that both women, with only a small portion of their brains in active commission, made adjustments to life at least equal to the average, he advances the theory that the average brain, with all parts working, develops but a fraction of its potential power, and that many brains could be made more efficient by pursuing proper methods of development.—*B. S. Burks* (Stanford).

1199. Ugolotti, E. [Epilepsy from injuries to the frontal lobes without apparent psychological symptoms.] *Giorn. di psich. clin. e tec. manic.*, 1928, No. 1-2.—A case which offers modifications of character which are typical of genuine epilepsy.—*G. Corberi* (Milan).

1200. White, W. A. Lectures in psychiatry. New York & Washington: Nervous and Mental Disease Publishing Co., 1928. (*Nerv. & Ment. Dis. Monog. Ser.*, No. 51.) Pp. v + 167. \$3.00.—Presents cases in situation (prison) psychoses, general paresis, mental deficiency, epilepsy, manic-depressive psychoses (with involution melancholia), paranoia, and dementia praecox. Emphasizes the importance, for an understanding of every mental abnormality, (1) of considering the reactions of the organism as a whole (total reactions); (2) of approaching the problems of the individual from (a) the laboratory level, (b) the physiological level, (c) the psychological level, and (d) the sociological level of disturbance; and (3) of giving attention to the extra-neural pathology. Pathology other than neural is especially helpful in explaining the epilepsies, the schizophrenias and the manic-depressive disorders. "The order of presentation of the material makes the transition to the field of psychiatry at once more logical and easier, whether to the student of medicine, the social worker, or the interested layman" (p. iii).—*T. H. Haines* (New York City).

1201. Wimmer, A. Epilepsy in chronic, epidemic encephalitis. *Acta Psychiat. et Neur.*, 1928, 3, 367-407.—Referring to several other of his articles, the writer in the above publication presents a discussion of 21 cases of both a polymorphous and a monosymptomatic nature. In 11 of the cases of epilepsy during the course of chronic epidemic encephalitis, the epileptic seizures are intimately associated with



marked neurological and psychotic symptoms of a more or less conspicuous encephalitic type. In the first place, there were eye symptoms; paralysis of individual eye muscles or of associated movements of the eyes, especially that of convergence; internal ophthalmoplegia, mainly of the accommodation reflex; retrobulbar neuritis, or its sequels, such as central scotoma; or, even, optic neuritis or papillary stasis, the total clinical picture reminding one very much of that of a brain tumor. Furthermore, there may be speech troubles, hemiplegias, and, together with these, for some time at least, the epileptic seizures may show an almost complete Jacksonian type. Hyperkinesias, such as tremor or myoclonias, are not altogether rare, whereas marked parkinsonian states were seen in only one or two patients. To this may be added the highly important vegetative troubles, such as adiposity, loss of hair, polyuria, polydipsia, sweating, etc. Furthermore, there were episodic rise in temperature, and fits of diurnal somnolence, sometimes taking the shape of narcolepsy or true lethargy. Finally, there may be changes in the spinal fluid. In another group of ten cases there is almost a "monosymptomatic" epilepsy; i.e., in these patients, excepting a more or less convincing history of "Spanish disease" or perhaps no such history at all, one is left to rely for the diagnosis upon slight neurological symptoms, such as vegetative troubles, slight myoclonias, etc. In these cases any possible changes in the spinal fluid acquire a very decisive importance. Interesting relationships between the "Spanish disease" and epilepsy are discussed. Bibliography.—M. L. Reymert (Wittenberg).

[See also abstracts 990, 1072, 1086, 1130, 1205, 1208, 1209, 1211, 1213, 1219, 1220, 1221, 1230, 1233, 1241, 1244, 1245, 1304, 1314, 1355, 1361.]

#### SOCIAL FUNCTIONS OF THE INDIVIDUAL

1202. Additon, H. Environment as it relates to delinquency. *J. Soc. Hygiene*, 1928, 14, 471-480.—Although social workers have no complete factual data regarding the relation between environment and delinquency, various studies indicate that broken homes, economic stress, and lack of vocational guidance affect conduct adversely. A better synthesizing of knowledge and activities are needed for the effective study and treatment of delinquency.—D. Grauer (Chicago, Ill.).

1203. [Anon.] The sex ratio. *J. Soc. Hygiene*, 1928, 14, 483-485.—According to Meyrick Booth, writing in *Nineteenth Century*, the sex ratio in England, contrary to popular opinion that there is a great excess of women, is 100 males to 108 females. The large number of unmarried women of marriageable age (3 million) is attributed to the present-day tendency of education which prepares women to compete with men in industry, thus making it more difficult for the average man to earn a family wage.—D. Grauer (Chicago, Ill.).

1204. Bailey, W. L. The religion of the successful. *Relig. Educ.*, 1928, 23, 768-773.—The religion of the successful is not so much expressed in the churches as in the community spirit and civic ideals

of an American community. In general we have not been making very much of a success of religion as such. In organization, equipment and effectiveness churches do not compare favorably with schools and hospitals, which are controlled by the successful. The most practical emphasis for the church is upon the rediscovery and reassertion of Jesus.—J. P. Hyman (Stoneham, Mass.).

1205. Baker, A. T. The psychiatric clinic of Sing Sing Prison. *Psychiat. Quar.*, 1928, 3, 464-465.—A case of mental defect is mentioned to demonstrate the value of psychiatric work with delinquents. The advice of the psychiatrist that the defective man be segregated was not followed. This man's incendiary acts involved far greater expense than the maintenance of a laboratory for a year, and endangered the lives of a number of people as well. The value derived from classification of the prison population, the knowledge gained from research studies, the value to the prisoners of talking over their difficulties with them and thus helping them to make better personal adjustments, are all emphasized as vastly important contributions made by the psychiatric clinic in Sing Sing.—E. T. Burr (Vocational Adjustment Bureau).

1206. Ball, R. J. A survey of 146 committed delinquents in San Francisco. *J. Juv. Res.*, 1928, 12, 241-243.—Data are given concerning the condition of the parents, the nativity of the parents, the nature of the delinquencies, the number of arrests, and the physical condition of 146 boys in the charge of the Boys' Aid Society of San Francisco.—H. L. Koch (Texas).

1207. Bensch, I. Bericht über den III Kongress für Ästhetik und allgemeine Kunstwissenschaft in Halle, 7. bis 9. Juni 1927. (Report on the Third Congress of Esthetics and the General Study of Art, Halle, June 7-9, 1927.) *Arch. f. d. ges. Psychol.*, 1928, 62, 241-272.—A large number of discourses are briefly summarized; they were divided into three groups, according as they dealt with general topics or the special topics of symbolism or rhythm. Among them were the following: "The history and systematics of art," by Dessoir, and "The rôle of esthetics in the method of the *Geisteswissenschaften*," by Frankl; "The concept of the symbol and its place in the system of philosophy," by Cassirer, and "The symbol in its ethnological significance," by Thurnwald and Kühn; and discussions of rhythm by Ziehen, Katz and von Waltershausen.—D. McL. Purdy (California).

1208. Branham, V. C. Need for additional clinic service. *Psychiat. Quar.*, 1928, 3, 470-472.—The Baumes Crime Commission has assured the New York State Committee on Mental Hygiene that in its report to the legislature it will adequately present the psychiatric aspects of the prevention and treatment of crime. Psychiatry does not stand for the indiscriminate freeing of prisoners on the plea of insanity, nor does it have any sentimental attitude which would be the means of subverting justice. It stands for a much greater protection of the community than does the present method of assigning

prisoners on the basis of the first terms of commitment, inasmuch as psychiatry provides for a thorough study of individual offenders, who should be segregated for a prolonged period. The Mental Hygiene Commission recommended that a clinic be established in connection with the Magistrate's Court as well as in connection with the Court of General Sessions of New York City. It also recommended that a travelling clinic be created for the purpose of making periodical visits to the courts and jails throughout the state, examining selected cases which do not seem to be definitely insane but who are extremely psychopathic in make-up. It was further recommended that legislation be enacted to make the recommendations of the Commission effective.—*E. T. Burr* (Vocational Adjustment Bureau).

1209. **Brown, S., 2d.** The value of psychiatric examination of court cases not actually insane. *Psychiat. Quar.*, 1928, 3, 448-450.—The psychiatrist is interested in any form of human conduct which is markedly at variance with the normal. Therefore he is interested in the criminal and in the underlying cause of his conduct disorders. He makes an investigation of the man's mind from the standpoint of his early development and environment, his degree of intelligence and judgment, his self-control, his emotions, past experiences and general background. He then feels that intelligent recommendations may be made. In studying a representative group of cases on probation it is found that a large percentage have been "socially defective" and not mentally defective or psychopathic. Such cases are in need of social supervision in the community and guidance in their work and home life. Trained psychiatrists should carry on all this work under state auspices.—*E. T. Burr* (Vocational Adjustment Bureau).

1210. **Bryk, F.** *Neger-Eros, ethnologische Studien über das Sexualleben bei Negeren.* (Black Eros; ethnological studies on the sexual life of negroes.) Berlin: A. Marcus & E. Weber's Verlag, 1928.—*W. S. Hunter* (Clark).

1211. **Burdick, C. M.** The importance of knowing the personality make-up of the criminal. *Psychiat. Quar.*, 1928, 3, 456-458.—The problem must be approached in a scientific spirit. Much has been learned as to the handling of conduct disorders through the results obtained in mental clinics, child guidance clinics and behavior clinics. One of the greatest advances in modern medicine has been the application of psychological and psychiatric principles in the treatment of all kinds of human disorders. Crime is a conduct disorder measured in terms of social customs. If conduct and behavior are to be properly understood and evaluated it must be done by those trained in the study of normal and abnormal thought processes. Courts of law should have the benefit of the intensive study of the personality make-up of each individual offender. This will provide a basis for his proper classification and treatment. Mass treatment of the criminal will never get anywhere.—*E. T. Burr* (Vocational Adjustment Bureau).

1212. **Calhoun, C. H.** A follow-up study of 100 normal and 100 subnormal delinquent boys. *J. Juv. Res.*, 1928, 12, 236-240.—100 intellectually

normal and 100 retarded boys referred to the Ohio Bureau of Juvenile Research for examination by various courts were followed for a period of time the extent of which is not stated. Although the dull boys came more frequently from homes that were broken and although their parents were more frequently foreign-born than was the case for the normal boys, the delinquencies of the former committed subsequent to the Bureau's examination were much less extensive and serious than those of the latter. The normal group totaled 206 court appearances, 753 months at the Boys' Industrial Home, and thefts or damaged property to the extent of \$158,777; whereas the corresponding figures for the subnormal are, respectively, 125, 210, and 860.—*H. L. Koch* (Texas).

1213. **Cass, E. R.** Psychiatry in the treatment of the offender. *Psychiat. Quar.*, 1928, 3, 458-460.—Law assumes to be able to differentiate between degrees of crime, and sets maximum sentences according to the seriousness of the offense, not according to the apparent mental and physical characteristics of the offender. The mental study and treatment of the offender offers the only hope in sight for a different approach. In New York State the mentally defective delinquent is cared for in a separate institution. If his mental condition justifies such action, he may be held for life in this institution. The psychiatric treatment of persons accused of crime is worthy of a thorough trial and to that end should have the benefit of public patience, confidence and whole-hearted support.—*E. T. Burr* (Vocational Adjustment Bureau).

1214. **Chandler, A. R.** Recent experiments on visual aesthetics. *Psychol. Bull.*, 1928, 25, 720-732.—Studies published since 1925 have been devoted predominantly to judgments of color. These, as well as the studies on forms and pictures, tend to bring out forcibly the conclusions of Allersch in particular that variety and inconsistency in judgments seem to be the rule.—*J. F. Dashiell* (North Carolina).

1215. **Cronbach, A.** The psychology of religion. A bibliographical survey. *Psychol. Bull.*, 1928, 25, 701-719.—The 140 titles reviewed include many works descriptive of special religious phenomena and many on biography. Psychoanalytic interpretations run through many discussions; much of the writing is controversial in tone; some of it practical in character. "One toils through this literature with the feeling that the old leads are well nigh exhausted and that the time is ripe for renewal and fresh discovery. Less quotation and more observation . . . is the need of the hour."—*J. F. Dashiell* (North Carolina).

1216. **Falcone, P.** *L'infanticidio in Cina.* (Infanticide in China.) *Arch. di antrop. crim.*, 1928, 48, fasc. iv.—The author passes in review the literature on Chinese infanticide, and arrives at the following conclusions: (1) That infanticide in China, while more extensive than in Europe, is not as extensive as it appears at first sight; (2) that it is less extensive in North China (with the exception of Shan-si) than in Southern China, and centers around the zones of primitive and ethnically mixed

populations; (3) that it does not enjoy, in Chinese culture and popular morality, the prestige ascribed to it by some; (4) that, in addition to the desire to cover up the consequences of sexual error, it is also due to poverty and superstition; (5) that it is mostly confined to female infants.—*R. E. Schwarz* (New York University).

1217. *Granet, M. L'Expression de la pensée en chinois.* (Expression of thought in Chinese.) *J. de psychol.*, 1928, 25, 617-656.—The article is in two parts, the first dealing with the language and writing of the Chinese and the second with their style. The vocal and graphic emblems, the sentence construction, and the rhythms of the language are discussed in detail, reference being made to the Chinese classics. The language is composed of concrete monosyllabic words and is scarcely adequate for dealing with abstract concepts, for analyzing ideas, or for the exposition of doctrines. It is, however, adapted for the communication of sentimental attitudes, for suggesting conduct and soliciting action.—*N. L. Munn* (Clark).

1218. *Harris, M. B. I supposed I was stupid.* *Survey*, 1928, 61, 235-237.—A description of the facilities for the psychological examination, education, and vocational training of the Federal Industrial Institution for Women in West Virginia.—*D. Grauer* (Chicago, Ill.).

1219. *Hart, H. H. Remarks on permanent segregation of criminals.* *Psychiat. Quar.*, 1928, 3, 473-475.—It has been the general testimony of judges, prosecuting attorneys and prison wardens in places where competent psychiatrists have been installed that the service which these experts have rendered has been of the greatest assistance in dealing wisely and justly with accused and sentenced persons who have come within their jurisdiction.—*E. T. Burr* (Vocational Adjustment Bureau).

1220. *Haviland, C. F. Psychiatric examinations as a routine court procedure.* *Psychiat. Quar.*, 1928, 3, 444-447.—Psychiatrists seek exactly the same objectives as are sought by other groups interested in the crime problem. Contrary to a more or less prevalent impression, psychiatry in dealing with the criminal problem has no room for soft and false sentimentality. Psychiatry seeks to investigate and determine when possible the fundamental activity of the individual concerned and the mental factors underlying such mental activity. It deems the criminal the primary object of study, regarding the crime itself as relatively unimportant and frequently determined by more or less accidental circumstances. It maintains that every offender should be studied from the psychiatric viewpoint. If the psychiatric aspects of crime were paramount, and the mental condition of the criminal used as a basis for continued detention, with parole or discharge granted only when psychiatric examination gave a reasonable expectation that further criminal conduct need not be anticipated, it is certain, Haviland states, that in general criminals would be much longer confined than is now the case, with increased security to society. He believes that it would be not only a humane but an economic procedure to sift

out all abnormal offenders prior to trial rather than after conviction. This method would render unnecessary numerous expensive trials and would eliminate, as it has done in Massachusetts, the deplorable spectacle of the so-called "battles of the experts."—*E. T. Burr* (Vocational Adjustment Bureau).

1221. *Hicks, E. E. Suggestions for securing better psychiatric examinations of defendants.* *Psychiat. Quar.*, 1928, 3, 468-469.—Abolishment of lunacy commissions and the use of psychopathic hospitals where prison wards are maintained is recommended. Defendants should be placed under the observation of psychiatric experts.—*E. T. Burr* (Vocational Adjustment Bureau).

1222. *Hobhouse, L. T. Über einige der primitivsten Völker.* (Concerning some of the most primitive peoples.) *Zsch. f. Völker-psychol. u. Soziol.*, 1928, 4, 396-424.—In order to study the evolution of society Hobhouse turns to creditable reports concerning a number of currently existing most primitive peoples. The article summarizes such material concerning fourteen groups from Central and South Africa, from the islands of the Indian ocean, and from South America. The peoples live mostly as groups rather than as races, and cultivate communistic practices. He concludes that these are the fundamental facts of social organization.—*J. R. Kantor* (Indiana).

1223. *Holmes, S. J. Will the negro survive in the north?* *Scient. Mo.*, 1928, 27, 557-561.—*J. F. Dashiell* (North Carolina).

1224. *Hopkins, P. Father or sons. A study in social psychology.* London: Kegan, Paul, 1927. Pp. xv + 252. 12s. 6d.—*W. S. Hunter* (Clark).

1225. *Ichheiser, G. Die Bedeutung der leiblichen Schönheit des Individuums in sozial-psychologischer und soziologischer Beleuchtung.* (The significance of the bodily beauty of the individual illustrated in social psychology and sociology.) *Zsch. f. Völker-psychol. u. Soziol.*, 1928, 3, 257-265.—Author discusses two aspects of problem of personal beauty of women as types of human beauty. First, the influences of beauty on self-consciousness, and secondly, the contribution of beauty to social success. Since self-consciousness is a function of the social atmosphere (attitudes of others) and since the beautiful woman makes her appeal not through her intellect or character but through her beauty, then social psychological situations (development of self-consciousness) bear the aspect of a socially conditioned biological fact. From the sociological standpoint personal (bodily) beauty is a great asset in attaining not only a high marital position with its accompanying advantages, but also strictly economic and social desiderata.—*J. R. Kantor* (Indiana).

1226. *Jancke, H. Musikpsychologische Studien.* (Studies in the psychology of music.) *Arch. f. d. ges. Psychol.*, 1928, 62, 273-314.—The author writes the "prolegomena to a psychology of the understanding of music." This discipline has to do with the function of musical experience as a whole. The understanding of music can be defined as the mental unification of all the individual psychical processes



excited by music into a total consciousness of the meaning of the experienced material. There are as many possible ways of understanding music as there are persons who hear music. This irrational understanding is to be clearly distinguished from the rational understanding which is contingent upon knowledge about music. The irrational understanding is frequently confused with the appreciation of the composer's intention, with empathy, and with the grasping of the effects (e.g., religious feelings) caused by music. None of these is a necessary condition for the irrational understanding of music. Only in small measure is this understanding generated in the momentary consciousness; we must look for it mainly in the phylogenetically and ontogenetically determined constitution. The problem is to seize the whole person (not merely his reason or his momentary feeling-state) in his relation to music. We must show how musical understanding builds itself up out of elementary functions from the simple up to the complex forms and can eventually be treated causally. For a psychology of musical understanding a study of the historical relations between the human race and music is of especial importance, for we can thereby survey at least part of the psychophysiological phylogenesis and the reciprocal adaptation between man and music. The author proceeds to a discussion of the special problems involved in such a study.—*D. McL. Purdy* (California).

1227. **Johnson, A. E.** Money madness. *Survey*, 1928, 61, 142-143.—A classification of individuals on the basis of their false ideas regarding money.—*D. Grauer* (Chicago, Ill.).

1228. **Kaiser, L.** Contributions à l'investigation des sons du langage Hollandais. II. Les voyelles OO, EU, et EE suivies ou non de R. (Contributions to the study of the sounds of the Dutch language. II. The vowels oo, eu, and ee, with and without an r following.) *Arch. néerl. de physiol.*, 1928, 13, 29-49.—An r which follows an oo, eu, or ee, has the effect of displacing their sounds in the direction of aa. This effect is stronger in the French and English than in the Dutch language.—*C. P. Stone* (Institute for Juvenile Research).

1229. **Keyser, L. S.** A handbook of Christian psychology. Burlington, Iowa: Lutheran Literary Board, 1928. Pp. 169. \$1.50.—An attempted correlation of Biblical and scientific psychology.—*R. Stone* (Clark).

1230. **Kirchwey, G. W.** The elimination from the community of the psychopathic recidivist. *Psychiat. Quar.*, 1928, 3, 453-456.—The psychopathic or demoralized personality is the real problem in prison discipline, much harder to deal with or control than the occasional violently insane individual. The most important issue that confronts us in our warfare on crime is the elimination of this dangerous and demoralizing element from the prisons and from society. The only way in which this can be effectually accomplished is by providing for a thorough study by competent psychiatrists of every person convicted of crime. The establishment of a routine procedure for identifying and eliminating these dangerous personalities, whether insane, psy-

chopathic or feeble-minded, before court trial, is recommended as an economical procedure.—*E. T. Burr* (Vocational Adjustment Bureau).

1231. **Knox, E. E.** A follow-up of 103 Whittier State School boys ten years after admission. *J. Juv. Res.*, 1928, 12, 254-260.—Of the boys admitted to the Whittier State School in 1917, follow-up records over a period of 10 years were available for 80. A rating of these 80 cases in terms of the social and vocational adjustment they had achieved revealed that 5.82% of the boys had made a successful adjustment, whereas 38% had failed definitely in meeting social requirements. The age at which the boys entered Whittier State School showed no definite relationship to the degree of their life success, although the latter was positively correlated with such factors as the boys' intelligence, the home conditions of their early life, and the school grades they received at Whittier.—*H. L. Koch* (Texas).

1232. **Landman, J. H.** The history of human sterilization in the United States—theory, statute, adjudication. *Illinois Law Rev.*, 1929, 23, 463-480.—Part I treats of the extent of feeble-mindedness in the United States and of the various theories concerning the inheritance of the grades of dementia. Part II deals with a criticism, pro and con, of the *Buck vs. Bell* case of the United States Supreme Court (47 Sup. Ct. Rep. 584, May 2, 1927) which held that the Virginia sterilization law was not a violation of the Fourteenth Amendment of the federal constitution and was therefore constitutional. Prior to this decision, twenty-three states of the Union had at one time or other sterilization laws as a social therapeutic agent, and about seven thousand people had been sterilized. On the strength of this decision, Kentucky, Louisiana, and Pennsylvania have made futile attempts to pass such legislation and Mississippi succeeded in passing such a statute. The legal bibliography provides all the state sterilization statutes, the court decisions whenever they involve them, and the approximate number of sterilized convicts.—*J. H. Landman* (College of the City of New York).

1233. **Leahy, S. R.** Notes on certain abuses in the field of criminology. *Psychiat. Quar.*, 1928, 3, 462.—Physicians who are not psychiatrists are being appointed to commissions by judges both in New York and Kings County, and are passing on mental conditions of criminals. Another abuse is that persons alleged to be insane are not being transferred from the county jail in Brooklyn to the observation ward of the hospital. A number of constitutional psychopaths, who are chronic repeaters and should be referred to special state institutions in accordance with the mental hygiene law, are at large.—*E. T. Burr* (Vocational Adjustment Bureau).

1234. **Lesser, A.** Bibliography of American folklore, 1915-1928. *J. Amer. Folk-lore*, 1928, 159, 1-60.—*J. R. Kantor* (Indiana).

1235. **Lévy-Bruhl, L.** The "soul" of the primitive. New York: Macmillan, 1928. Pp. 351. \$5.00.—The problem of the ways in which primitives conceive of their own individuality is elucidated by

an excursion into their customs and traditions. In an introductory chapter the author sets forth the primitive's idea of the homogeneity of essence in all things. Men, animals, and inanimate objects all have the same "essence." In subsequent chapters he presents the thesis that the group and not the individual is the real unit in primitive society. The "appurtenances" of the individual, his secretions, excretions, footprints, remains of food, and objects made or handled by him are regarded as an integral part of himself. Furthermore, the "appurtenances" of an individual are regarded by other members of the group as the equivalent of the individual himself. After death the individual's property is still his and cannot be appropriated by other members of the group. Duality and bi-presence are almost universal conceptions among primitives and death is merely "the result of one or more *actions de présence*." The universal belief in survival of the dead, the duality and bi-presence of the dead, the condition of the dead, and reincarnation, receive a detailed discussion. The concept of the permanence of the group seems fundamental to the primitive mind. "Through . . . symbiosis of the living and the dead, a symbiosis which is both mystic and concrete, the individual is not wholly himself except by virtue of the ancestors who live once more in his personality."—*N. L. Munn* (Clark).

1236. **Marcus, G.** Social attitudes as they are affected by financial dependency and relief-giving. *Family*, 1928, 9, 135-140.—The case worker often finds that the giving of relief seems to result in a loss of self-respect in formerly self-reliant clients. This deterioration in the client is wrongly attributed to the effect of relief itself, whereas it is due to an emotional dependency produced either by the feeling of insecurity following social maladjustment, or to personality difficulties existing previous to the granting of relief. It is the function of the case worker to evaluate the personality assets and liabilities of the client in order to prevent emotional dependency rather than to discourage dependency merely by reducing or withholding relief, which is the "modus operandi of the family case worker until she establishes contact as the basis for influence."—*D. Grauer* (Chicago, Ill.).

1237. **Maruyama, R.** Delinquency and environment. *Kyoiku-shinri-gaku Kenkyu* (Studies in Educational Psychology), 1927, 2, No. 6.—The results of a study of the environment of the delinquent children at Aichi Institute showed that at the time of registration  $\frac{3}{4}$  of these children lacked either one or both parents. The majority of the fathers and guardians were day laborers or coolies. They owned little or no property. Among the delinquents there were more illegitimate children than the normal, more city-bred children than country-bred. The initial crime was committed most frequently around 10 years.—*J. G. Yoshioka* (Institute for Juvenile Research).

1238. **McKinney, W. A.** The religion of the unsuccessful. *Relig. Educ.*, 1928, 23, 763-768.—Modern industrial system has deprived the average worker of his industrial independence. His employment is

not secure. The moneyed class that has thus reduced him controls the churches, hence the laboring man has become indifferent or hostile to religion. The observation and experience of the writer show that this attitude would be changed if the teachings of Jesus were put into practice by employers.—*J. P. Hylan* (Stoneham, Mass.).

1239. **Mendelssohn, A., & Mendelssohn, G.** *Der Mensch in der Handschrift*. (Man in handwriting.) Leipzig: E. A. Seeman, 1928.—*W. S. Hunter* (Clark).

1240. **Metfessel, M.** Phonophotography in folk music: American negro songs in new notation. Chapel Hill: Univ. North Carolina Press, 1928. Pp. x + 181. \$3.00.—There is an introduction consisting of extracts from the writings of Carl E. Seashore, giving an account of the history of the development of the technique employed in the present monograph. Seashore claims that "everything in the way of musical expression that the singer conveys to the listener is conveyed in terms of the sound wave. . . . The sound waves may be intercepted, recorded, measured, and analyzed by instruments of precision so that we secure a detailed and faithful objective record of what the musician conveyed through his medium." The monograph consists of illustrations and discussions of the singing of the negro folk-songs as revealed by a phonophotographic camera in a notation devised by the author. The new notation shows in detail what the singer is actually doing, trick ornaments, and tempo, interval and rhythmical deviations.—*M. Schoen* (Carnegie Institute of Technology).

1241. **Moore, J. W.** Examination of prisoners before trial. *Psychiat. Quar.*, 1928, 3, 451-452.—Discussion of the methods by which examination of prisoners before trial is carried on in New York State. Provisions for simplifying and consolidating and making less expensive the observation of prisoners by commissions should be made. Psychiatric sifting of cases that go through the inferior courts is particularly needed.—*E. T. Burr* (Vocational Adjustment Bureau).

1242. **Ogburn, W. F., & Goldenweiser, A.** The social sciences and their interrelations. Boston: Houghton Mifflin, 1927. Pp. viii + 506. \$3.50.—Thirty-nine essays, by as many authors, treat of the relationship of anthropology, economics, history, political science and sociology to one another and to ethics, history, law, psychology, religion and statistics. Each contributor considers one pair of sciences. In addition there are four essays by Frank H. Hankins, William I. Kilpatrick, Morris R. Cohen and William Pepperell Montague dealing respectively with the relations of the social sciences as a whole to biology, to education, to the natural sciences and to philosophy. These form the concluding chapters of the volume. Eighteen of the essays are devoted to the interrelations of sociology and anthropology to other allied sciences; economics appears in eight of the titles and psychology in five. The purpose of the volume is "to present an integral picture of the present interrelations of the social sciences, with particular reference to the United States, as well as to lay bare the potentialities for

future development." Goldenweiser, who writes of anthropology and psychology, examines the psychological assumptions underlying major trends in the fields of anthropology and points out "how intimately the theories of cultural anthropology are interrelated with psychological insight—or the absence of it." The chapter on economics and psychology is written by Z. Carl Dickenson, who considers the development of a closer interrelationship between these fields and calls attention to the factors (theories of the general nature of human behavior, and increasingly accurate, quantitative methods of investigation) which have been largely responsible for this development and for greater activity in the border-line fields of research. Wilson D. Wallis, writing of history and psychology, considers the extent to which the convictions and conscious or unconscious motives of the historian influence his record of events. Psychology has given insight into motives (necessary for interpreting historical events) while social psychology has contributed the view that the group may function as a unit among other unit groups. Although psychological analysis is only one of the historian's tools, an understanding of mental patterns is important. Floyd H. Allport writes of the relationship of political science to psychology as a field of political psychology which rests upon the study of the individual. To this development political scientists and psychologists have both contributed. He considers "the common segment view," which deals with problems of public opinion as characteristics common to a group of individuals, and the "face to face situation," which considers political relationships as reactions of personalities one to another. Each view supplements the other. Allport concludes that the political scientists who choose to discard the structural point of view "will see in the relation between political science and psychology not an overlapping but an identity." L. L. Bernard, author of the chapter on sociology and psychology, traces the development of the intermediate science of social psychology and discusses the opposing viewpoints (psychological and sociological) resulting from this overlapping of interests. Bernard classifies environments and considers that physical, organic, social and composite or derivative control environments are all important for both psychology and sociology, but that it is in the institutionalized or control environments that the "data of social psychology disclose themselves to the investigator." It is "to the further organization and perfecting of these environments as social and individual control agencies that the principles of social psychology, as well as psychology and sociology, are mainly applied." There are chapters on sociology and statistics, by William Ogburn; on sociology and economics, by A. B. Wolfe; on anthropology and ethics, by John B. Dewey, and on anthropology and political science, by J. L. Myers. The volume, written as it is by workers in many fields, presents the diversity of viewpoint, the variety of approach and the abundance of material which characterizes the field of the social sciences, and it reveals clearly the fallacy of assuming that

any one of these fields is independent of the others. The value of the volume for the student is enhanced by the careful index and by the extensive references which follow each essay.—E. F. Kinder (New York City).

1243. Oppenheim, D. E. *Zu Schillers Novelle: Der Verbrecher aus verlorener Ehre.* (On Schiller's novel *The Criminal From Lost Honor.*) *Int. Zsch. f. Individual-psychol.*, 1928, 5, 358-362.—O. N. de Weerdt (Beloit).

1244. Overholser, W. *Psychiatric examinations of prisoners in Massachusetts.* *Psychiat. Quar.*, 1928, 3, 469-470.—It is mandatory upon clerks of court to report to the Department of Mental Diseases persons accused of murder in the first degree; persons indicted or bound over for felony who have either been previously convicted for a felony, or who have been previously indicted for any other offense more than once. The law is providing for routine examinations by psychiatrists who are impartial, and has done away with the conflicting testimony of experts or commissions in the ordinary murder trials. Great expense has been saved the counties by doing away with protracted trials. Court officials look with favor upon this procedure and some are getting a psychiatric viewpoint.—E. T. Burr (Vocational Adjustment Bureau).

1245. Palmer, L. J. *Recent trends in the giving of expert testimony.* *Psychiat. Quar.*, 1928, 3, 465-467.—Court-room controversies between medical experts in matters of mental status are occurring less frequently due to the fact that qualified psychiatric experts are retained by both prosecution and defense, have made joint examinations and have satisfied themselves of the sanity or insanity of the prisoner previous to the trial. Consensus of opinions of those engaged in criminological fields would indicate that the establishment of legislation providing for psychiatric classification of all convicted criminals immediately following conviction should be recommended. Psychiatric case studies should be at the disposal of parole boards, who should be authorized to recommend further segregation for those prisoners who for behavior reasons require institutional supervision.—E. T. Burr (Vocational Adjustment Bureau).

1246. Pratt, J. B. *The pilgrimage of Buddhism.* New York: Macmillan, 1928. Pp. ix + 758.—Writing from the viewpoint of the psychology of religion and of philosophy, and desiring to present a sympathetic and intimate view of Buddhism as it is lived today in the Buddhist lands (Ceylon, Burma, Siam, Cambodia, China, Korea, and Japan) the author presents results of much study and personal acquaintance with representative living Buddhists. The history of Buddhism (which includes racial, social, and economic factors) and its continuity as a whole are presented, with discussion of the phases of Buddhism in each country. The central teaching of Buddhism is the moral life, with more emphasis laid upon the negative side than is the case with the teachings of Christianity. While Buddhism is elastic and adaptable, and is characterized by a certain passivity, there is, however, a mutual warfare be-



tween Buddhism and Christianity, which constitutes a grave problem. The future holds four possible relations that the two religions may have: continuance of mutual warfare; destroying of one by the other; coalescence of the two; tacit agreement to live side by side as friendly rivals. Footnotes, references, and an index are included.—*R. Williams* (San José, Calif.).

1247. Preyer, W. *Zur Psychologie des Schreibens mit besonderer Rücksicht auf individuelle Verschiedenheiten der Handschriften*. (The psychology of writing, with special reference to individual differences in handwriting.) [Ed. by L. Klages.] Leipzig: Leopold Voss, 1928.—This work by Wilhelm Preyer (1841-1897) was ahead of his time and marks a decisive turning point in the development of the knowledge of handwriting. Here, with all respect for the work of French graphology personified by Michon, is the origin of the new branch in the development of the subject which has raised German graphology to the height of a science of expression. Preyer gives an analysis of the most abstract elements in handwriting. These, however, serve him only as points of departure for the writing movements which can be read from them, whose individuality he especially derived from such characteristic movements. With it there began a mode of thought which must end with the complete breaking down of Michon's sign graphology. Although he did not abandon the *signe fixé* he did give up the *signe négatif*, and the interpretation rested primarily upon an "entire symptom complex." If he did not take the decisive step of conceiving handwriting as a phenomenon of expression, his work nevertheless forms in a certain degree the basis for a new knowledge of expression which has been confirmed by Klages, who has, moreover, added an explanatory foreword to the book.—*L. Klages*.

1248. Raknes, O. *Les fondements psychologiques de la religion et l'extase*. (The psychological foundations of religion and ecstasy.) *J. de psychol.*, 1928, 25, 686-695.—The sacred is that to which are attributed the ecstatic experiences of a society, while religion is a systematization of beliefs and practices having their origin in these ecstatic experiences. "Religion owes its historical importance to that which, during practically the whole course of history, has alone organized and utilized in a more or less systematic manner ecstatic experiences, which, alone, bring into consciousness the organized self and the psychic elements located outside of it, thus permitting useful reorganizations of the whole spirit, and 'reinforcements' of the self by unknown forces."—*N. L. Munn* (Clark).

1249. Rasey, M. J., & Dennerline, J. *Test für moralische Meinung*. (Test for moral opinion.) *Int. Zsch. f. Individual-psychol.*, 1928, 5, 347-349.—The test is based on the text of an old Indian's advice to young people concerning stealing, betraying friends, protection of women and children, obedience to parents, revenge on foes, attitude toward evil spirit. The six topics are each covered by three groups of questions determining: first, the opinion of the old Indian; second, the opinion of the sub-

ject; third, subject's opinion of the relative value of the two positions. Each answer involves choice of one of four suggested in the test. Total of 18 opinions. No instructions for giving; no interpretations, norms, or references.—*O. N. de Weerd* (Beloit).

1250. Schroeder, T. *Guilt and inferiority as creator of religious experience*. *Psychoanal. Rev.*, 1929, 16, 46-54.—The author shows the "mental processes by which the internal aspect of the conflict of impulse, and a resultant feeling of guilt, of inferiority, develops into the essence of religiosity." For many, a mystical religion satisfies a personal need in that it creates a delusion of vital contact with some infinite source of power. If man lives in harmony with an adequate knowledge of the processes of nature, normal sexual satisfaction will supply all of his ecstatic needs. As long as there are unsolved emotional problems centering about sex the feeling of inadequacy arising in the sexual impulse is the essence of the emotional needs for religion. The tenacity with which many hold to their fantastic creeds and religious doctrines is in direct proportion to the emotional intensity of the guilty inferiority feeling.—*J. W. Nagge* (Clark).

1251. Sérouty, H. *Die Rolle von Individuum und Gesellschaft beim Hervorrufen von Kriegen*. (The rôle of the individual and society in the engendering of wars.) *Zsch. f. Völker-psychol. u. Soziol.*, 1928, 3, 256-279.—At the basis of the influences of a leader upon a group when wars are to be organized, and the urge to war in groups, lies the universal and inevitable participation of individuals in a social totality. Author connects this participation in war phenomena with the mystical participation of primitives as worked out by Durkheim and Lévy-Bruhl.—*J. R. Kantor* (Indiana).

1252. Sherman, M. *Emotional character of the singing voice*. *J. Exper. Psychol.*, 1928, 11, 495-497.—Thirty observers were asked to name the emotion (surprise, fear-pain, sorrow and anger-hate) a singer sought to convey by singing a single note (duration about 1½ seconds) five times. Eighteen emotions were variously named. Simple melodic sequences were also used. Both single tones and melodies "may convey emotional significance to the listener."—*S. Renshaw* (Ohio State).

1253. Shinkawa, I. *Weight of Japanese skull*. *Jiuzen-kai Zatsui* (J. Health Association), 1927, 32, No. 11, 12.—228 male skulls and 158 female skulls preserved in Kanazawa Medical School were weighed after all the missing teeth had been filled in. The average weight was found to be 513.36 gm. (male 576.63 gm., female 450.09 gm.). The average weight of mandible was 71.45 gm. (male 92.10 gm., female 60.79 gm.). The weights were lighter than those of Europeans, with the exception of the male mandible.—*J. G. Yoshioka* (Institute for Juvenile Research).

1254. Sommerfelt, A. *Sur la caractère psychologique des changements phonétiques*. (The psychological character of phonetic changes.) *J. de psychol.*, 1928, 25, 657-685.—Most linguists use a classificatory method in treating phonetic changes, as if classification of the changes were sufficient ex-

planation of them. An adequate explanation can be made only in terms of sociological and psychological influences. Phonetic changes cannot be adequately treated from an historical viewpoint. They are made subconsciously by indeterminate changes in the expression of the individual and the group and do not become perceptible until the break between the old and the new has become outstanding.—*N. L. Munn* (Clark).

1255. **Stein, E. A.** *A Russian experiment in criminology.* *School & Soc.*, 1928, 28, 789-792.—A description of Labor Communes for young criminals.—*H. L. Koch* (Texas).

1256. **Thurstone, L. L.** *An experimental study of nationality preferences.* *J. Gen. Psychol.*, 1928, 1, 405-425.—The psychophysical law of comparative judgment in its simplest form was successfully applied to discriminatory judgments of preference for 21 nationalities and races. A group of 239 subjects showed preferences for the following nationalities in the order named: Americans, Englishmen, Scotchmen, Irishmen, Frenchmen, Germans, Swedes, etc. The average discrepancy between the experimental and the calculated proportions was only 3 %. The law of comparative judgment can be used to measure the similarity between two groups in regard to their national attitudes and prejudices, and the degree of tolerance of a group for the nationalities in the list.—*H. Cason* (Rochester).

1257. **Toda, S.** *Tendency of marriage and divorce.* *Shakai-gaku Zasshi* (J. of Sociology), 1927, Nos. 33, 34, 35.—Various factors contributory to formation and dissolution of marriages were statistically studied. From the census taken by the Department of the Interior, Japanese Government, in 1918-1919, the following facts were found: Divorce was most frequent in married couples of ages 15-19. Couples of ages 20-24 and those of 25-29 were second and third, respectively, in frequency of divorce. Among the divorced couples 40-50% had no children. Very few couples who remained united were without children. Hence the percentage of the divorced couples without children in the total number of marriages is substantially the same as that given above. Irrespective of the presence or absence of children, the longer the union is continued the less frequently dissolution takes place.—*J. G. Yoshioka* (Institute for Juvenile Research).

1258. **Van Waters, M.** *Why Hickman hangs.* *Survey*, 1928, 61, 20-23.—The case of Edward Hickman, who killed Marion Parker in 1927, emphasizes the need for dispassionately studying the causes and methods of prevention of crime by means of the social history and by psychological and psychiatric examination of individuals who show symptoms of strain or who are found guilty of juvenile delinquency.—*D. Grauer* (Chicago, Ill.).

1259. **Wile, I. S.** *The changing I.Q. in children's institutions.* *Survey*, 1928, 61, 89-91.—Replies to a questionnaire submitted to the state board of charities of 28 states indicate that there is an increase in the number of children with intelligence below the average admitted to child-care institutions. That

the institutions are progressing is evidenced by their recognition of the educational problems presented by the type of children now being admitted.—*D. Grauer* (Chicago, Ill.).

1260. **Winkler, F.** *Über den bösen Blick.* (Concerning the evil eye.) *Int. Zsch. f. Individualpsychol.*, 1928, 5, 378-385.—The fear of the evil eye is so general and widespread that some universal cause must be found for it. Faith in the notion can only be explained as based on the sense of inferiority. Various developmental factors are discussed: the image of the observer reflected from the cornea of the other person arouses the belief in a resident sprite which can be utilized as a messenger of evil, the so-called fiery eye of dominant personalities, and the highly contagious eye diseases in the orient. Discussion is based in great measure on popular and literary sources.—*O. N. de Weerd* (Be-loit).

1261. **Yepsen, L. N.** *Measuring social adaptation.* *J. Juv. Res.*, 1928, 12, 254-260.—The author describes his Personal Behavior Score Card, the major divisions of which bear the following captions: *Attitude Of Others Toward Him, Sociability, Reliability, Truthfulness, Attitude Toward Others, Language Attitude, Property Attitude, Attitude Toward Superiors, Activities, Industriousness, Work, Initiative, Property, and Discipline.* It is claimed for the score card that: (1) it is as objective as such an instrument can be; (2) it differentiates well between the extremes of adjustment success; (3) it is reliable ( $r=.77$ ); (4) it measures something other than intelligence ( $r$  between Score Card score and Stanford-Binet M. A. = .05); and (5) it is useful in diagnosis. The results of three experiments are given—experiments employing the method of extreme cases and carried on in an effort to determine the validity of the Score Card.—*H. L. Koch* (Texas).

1262. **Zwaardemaker, H.** *La sonorité pour une intensité moyenne uniforme de la voix parlée.* (The sonority for a uniform mean intensity of the speaking voice.) *Arch. néerl. de physiol.*, 1928, 13, 1-28.—For an equivalent effort in speaking there is in the case of the more sonorous words a characteristic sonority. This sonority is a function of the duration and the physiological intensity (loudness) of the word. One may determine the intensity, and multiply that by the mean acoumetric coefficient, the latter being the inverse of the minimal perceptible sound of the word. As a first approximation one may take as a measure of the sonority of a word the product of its duration, the physical intensity, and the mean acoumetric coefficient.—*C. P. Stone* (Institute for Juvenile Research).

[See also abstracts 992, 1050, 1054, 1085, 1099, 1107, 1121, 1125, 1154, 1175, 1296, 1367, 1303, 1304, 1305, 1311, 1312, 1313, 1314, 1320, 1367.]

## INDUSTRIAL AND PERSONNEL PROBLEMS

1263. **Baumgarten, F.** *Berufseignungsprüfungen, Theorie und Praxis.* (The theory and practice of tests of vocational aptitude.) Munich, Berlin: R. Oldenbourg, 1928. Pp. 741. M. 24.—The aim of

this work is to describe the present position of psychotechnical tests of aptitude. Such an exposition includes not only those tests which have shown the greatest results in practice, but also those which have been of significance in the development or history of tests. In this manner the reader can follow the progress of testing in each vocational field (executive positions, drivers, aviators, commercial and office positions, selection of apprentices, etc.). In contrast to previous works of this kind the theoretical hypotheses and questions which are related to the psychology of testing are considered in great number. An attempt is also made toward a standardization of psychotechnical terminology and toward a classification of the different individual fields of psychotechnics in the most systematic way possible, so that the book contains a theory and practice of tests for vocational aptitude. The author goes on to a comprehensive treatment of this branch of the psychotechnical movement in all countries, on which account the material employed is based upon the entire literature of the world so far on this question. The American and Russian contributions are considered in great number. (The bibliography of Part 2 contains about 1,200 numbers.) The most objective and critical point of view possible is maintained on all debated questions, and the inadequacy and weak points of previous studies are pointed out. In the conclusion the author gives the outlook for the further probable development and expansion of vocational testing. In contrast to the praise of tests by dilettantes and by examiners poorly trained in the technical literature the author secures quite sober results and emphasizes the necessity of selection in the academic professions. Many problems of a purely social nature are merely touched in passing and the necessity of psychological training for the examiners and their most careful selection is proposed. The book is thus a textbook and a handbook of vocational tests.—*F. Baumgarten* (Solothurn, Switzerland).

1264. **Beeson, M. F., & Tope, R. E.** A study of vocational preferences of high school students. *Voc. Guid. Mag.*, 1928, 7, 115-119, 139.—By means of a questionnaire the vocational choices of high school pupils were investigated for three consecutive years; over 2,000 pupils answered the questions. The results from boys and girls were tabulated separately; marked sex differences were found, the five occupations standing first on each list showing no overlapping. The younger boys showed greater tendency to be influenced by the parent's vocation than the older, 14% in Grade IX choosing the father's occupation as opposed to 9% in Grades XI and XII. The period of greatest uncertainty as to occupation appears to be Grade XI, and it is pointed out that this should be the most propitious time for courses in vocational guidance, since the boys are old enough to give serious consideration to the question. The influence of various factors in making occupational choices, such as parents' and teachers' opinions, salary, chances for promotion, ability, chances for service to others, etc., are evaluated as to their relative importance. The consistency of

choices from year to year is also reported.—*D. E. Johannsen* (Clark).

1265. **Brewer, J. M.** The task of vocational guidance. *Voc. Guid. Mag.*, 1928, 6, 337-343.—The task of the counselor is five-fold, according to the author: (1) to serve the individual immediately, (2) to improve the guidance technique by following up the individual cases, (3) to improve the wisdom of children regarding various occupations through the co-operation of people already in the various fields of activity, (4) to improve the administration of vocational guidance, and (5) to contribute to the development and improvement of other forms of guidance.—*M. B. Mitchell* (Radeliffe).

1266. **Bureau of Postal Service, Department of Communication, Japanese Government.** A study of mail distribution (No. 1). (Official Report, 1927.)—An experimental study of the efficiency of mail distribution was made in the post offices in Tokyo and suburbs. It was found that the speed of assortment and distribution of mail was increased 10% when the size, paper, and script of letters were standardized. Under the present system where letters and cards are of any size an expert can assort letters at the rate of 87 per minute at the maximum.—*J. G. Yoshioka* (Institute for Juvenile Research).

1267. **Bush, C. H.** Success psychology: creative, constructive, and productive power of right thinking. Milwaukee: Caspar, Krueger & Dory, 1928. Pp. 232. \$1.50.—*W. S. Hunter* (Clark).

1268. **Capocaccia, M.** [The individual constitution and professional orientation.] *Rinnovamento med.*, 1928, No. 7.—The author explains the Italian constitutional medical studies, and shows the advantage of thus studying children of the primary school in order to determine their aptitude for one or another form of work.—*G. Vidoni* (Genoa).

1269. **Corre, M. P.** Vocational counseling. *Voc. Guid. Mag.*, 1929, 7, 159-163, 184.—A rather detailed description of the vocation bureau which is connected with the Cincinnati public schools.—*D. E. Johannsen* (Clark).

1270. **Cunliffe, R. B.** Study of occupations in the college. *Voc. Guid. Mag.*, 1929, 7, 153-158, 184.—This article is a description of a course in vocational guidance given at the College of Detroit.—*D. E. Johannsen* (Clark).

1271. **Fordyce, C.** Interests and aptitudes as criteria in vocational guidance. *Voc. Guid. Mag.*, 1928, 7, 134-139.—In an effort to describe the technique for guiding high school pupils in the choice of a vocation the author lists aptitude tests and interest questionnaires which may be used and the method of interpreting results.—*D. E. Johannsen* (Clark).

1272. **Freund, H.** Psychotechnik. (Psychotechnics.) (Vol. 7 of *Betriebswissenschaftlichen Bücher*, ed. W. Bondi.) Berlin: George Stilke, 1928.—This small book aims to provide the technically trained layman with an elementary knowledge of the field of industrial psychology. In the introduction (Chapter 1) the fundamental concepts of psychology and occupational physiology are treated with special ref-



erence to theories of practice and fatigue. Chapter 2, on the psychotechnics of shop management, proceeds from the classical work of F. W. Taylor. In this chapter the tendencies of modern industrial science are presented under the following points: (1) selection of the workman according to qualification, (2) practice and fatigue, (3) consideration of the bodily requirements in executing movements, (4) influence of willingness to work (occupational "set" and stimulation). The well-known method of industrial investigation, the time study, is mentioned only with reference to a special volume of the industrial science books. The discussion of fundamentals leads then to acute questions such as the workman's mode of life, working time, nature of the place of work (room, light, etc.) as well as theories of reward. Methods of payment are discussed with reference to their value as stimulants. The work study serves to improve the movements required for the work. The studies of Atzler find mention in this connection. Chapter 3, on the testing of occupational fitness, discusses next the social, sociological and general industrial bases of the principles of fitness. In regard to the methods of testing, which are at the present time very much in a state of flux, the individual method is reviewed very closely. A test which originates in the author's experience is discussed only as an example and no claim of general validity is made. Evaluation and measurement are gone into thoroughly. Chapter 4, on practice instruction, emphasizes the demands for shortening the learning time and for fundamental occupational training. The theory and practice of different methods are treated in a comparative manner. Chapter 5, on employment psychotechnics, inclines toward the work of Lysinsky and König for the most part and seeks to outline a conclusive picture of this field. In the concluding remarks reference is made to the fact that the development of so-called "subject-psychotechnics" has come out of object-psychotechnics. It is believed that in the future this branch of psychotechnics will be applied intensively. Especially will the questions of gauging conditions of work, signals, etc., with reference to their psychological influences be the chief object of study in the future.—*H. Freund*.

1273. Gelfus, F. *Über die psychotechnische Eignungsprüfung und ihre wirtschaftliche Bedeutung*. (Psychotechnical ability testing and its economic significance.) Berlin: Industrieverlag Spaeth & Linde, 1928.—*W. S. Hunter* (Clark).

1274. Ginn, S. J. *Salient trends in placement and follow-up*. *Voc. Guid. Mag.*, 1928, 7, 346-348.—*M. B. Mitchell* (Radeliffe).

1275. Greene, J. H. *Organizing a business for training*. *Voc. Guid. Mag.*, 1928, 6, 367-372.—A rather detailed outline for the organization and administration of training in a business institution is given. Under organization five points are considered: determination of aims to be attained, classification of the personnel, formulation of the training topics, selection of training methods, and setting up of the necessary training organization. Under administration three points are considered: installa-

tion, maintenance, and evaluation of the program.—*M. B. Mitchell* (Radeliffe).

1276. Hobson, J. A. *Incentives in the new industrial order*. London: L. Parsons, 1927. Pp. 160. 4s. 6d.—*W. S. Hunter* (Clark).

1277. Ishikawa, T. *Report on the investigation of sleep of industrial workers (Part 1)*. *Rodo Kagaku Kenkyu* (J. Science of Labor), 1927, 3, No. 4.—4,000 male and female factory hands and 1,000 students of a commercial school and girls' high school were studied as to their sleeping habits. It was found that on an average 30 minutes were required before they fell asleep after they had gone to bed. Night workers needed as much time as day workers before sleep began. The depth of sleep was less in night workers as compared with day workers. The average sleeping time was 7-8 hours; night workers tended to sleep less than day workers on an average. The disturbance of sleep was mainly caused by excessive heat and external noises. The most drowsy hour came between 1 and 2 p. m. for day workers and around 3 a. m. for night workers.—*J. G. Yoshioka* (Institute for Juvenile Research).

1278. Jones, L. *A project in student personnel service at the college level*. *School & Soc.*, 1928, 28, 765-768.—The scholastic expectancy of each freshman in a small college was determined on the basis of a series of placement examinations given at the opening of school. Students whose course grades fell below what was expected were given such help as the wisdom of the college officials and the resources of the institution afforded. The major phases of the total personnel program of the college may be described as: (1) getting faculty cooperation, (2) requiring freshman to take a course in study methods, (3) orienting the freshman well before the opening of school, (4) reporting each student's progress at frequent intervals to the parents, (5) helping students budget their time, (6) controlling the morale in the rooming quarters, (7) supervising health carefully, and (8) supplying a varied group of extra-curricular activities.—*H. L. Koch* (Texas).

1279. Konishi, Y. *A study of physiological standard for the selection of women workers (No. 1)*. *Rodo Kagaku Kenkyu* (J. Science of Labor), 1927, 4, No. 1.—108 factory girls (ages 14-20) were studied as to the change in pulse rate and blood pressure during work. It was found that the pulse rate was slowest when they were lying down. It increased progressively in sitting and standing positions. The increase was more marked in the young than in the old. Blood pressure was less in the sitting than in the recumbent position. Standing registered higher pressure than standing in the majority of cases. The increase in the blood pressure was more marked in the old than in the young. From physiological considerations the writer urges that the minimum age limit of factory girls should be raised to 18 years.—*J. G. Yoshioka* (Institute for Juvenile Research).

1280. Lehman, H. C., & Witty, P. A. *A pre-test for courses in vocational guidance and some alleged values of its use*. *Voc. Guid. Mag.*, 1928, 7, 145-152.

—The questionnaire reported is an attempt to obtain information on children's attitudes toward certain occupations before a child has to decide on the vocation which he will actually follow. A list of 200 occupations is given, with instructions to the child to mark those which he thinks he would be willing to engage in as a life work, listing at the end in order the three which he would prefer above all the others. Data thus obtained are recommended for use in courses in vocational guidance, since by securing such information at the beginning of the course it is possible to direct attention toward group misapprehensions and individual needs. Children change in their attitudes, but "interest is highly indicative of ability"; the vocational counselor must evaluate a child's interest in terms both of his ability and of its permanence, however, since others have found that interest is *not* indicative of ability.—D. E. Johannsen (Clark).

1281. Matsushima, S. Oxygen consumption during mental work (No. 1). *Rodo Kagaku Kenkyu* (J. Science of Labor), 1927, 3, No. 4.—10 mental workers were tested as to the rate of oxygen consumption during working hours with Krogh's spirometer. It was found that 0.247 liter of oxygen was consumed per hour per kg. of body weight, and 8,296 liters were needed per sq. meter of body surface per hour. As compared with the period of absolute rest, 3-7% (5% on the average) increase in oxygen consumption was noted.—J. G. Yoshioka (Institute for Juvenile Research).

1282. Pende, N. [The biotypology of workers.] *Rinascenza med.*, 1928, 6, No. 12-14.—The study consists of three lectures in which the author shows the importance of a complete study of the individual for professional orientation, indicating the importance of the constitutional factor in regard to diseases and employment accidents. He shows also the necessity of evaluating psychopathic heredity for the benefit of professions, and insists on the fact that orientation ought to take into account the conditions of speed, ability, strength, and resistance of the individual in relation to a given trade.—G. Vidoni (Genoa).

1283. Peri, A. [Science and hygienic protection of workers.] *Archivio fasc. di med. pol.*, 1928, No. 4.—The author emphasizes the importance of scientific production, illustrating its significance in practice and showing how the individual should be studied from the morphological, functional, and psychological angles. He believes in the fundamental conceptions of Pende.—G. Vidoni (Genoa).

1284. Research Bureau for Retail Training, University of Pittsburgh. Personnel research in department stores: a report of studies from 1918-1925. Pittsburgh: Research Bureau for Retail Training, Univ. Pittsburgh, 1927. Pp. viii + 254. \$3.00.—This book gives a comprehensive review of the studies carried on by the staff of the Research Bureau for Retail Training during the years 1918 to 1925. It is divided into five parts devoted respectively to (I) Training Salespeople, (II) Training Executives, (III) Store Analysis, (IV) Employment Tests and (V) The Bureau School. The first three of these parts constitute most of the book.

There is an introduction of 17 pages by Charters, describing the various projects of the Bureau, from its earliest days, and outlining the technical methods which were followed. Under the first topic, Training Salespeople, is discussed the development of information on "How to Sell at Retail," first issued as a book and later revised and used in other forms, as a manual on the technique of selling, and as subject matter for teaching. The "difficulty analysis" was used as a method of collecting data on retail salesmanship. The "case method" of teaching was tested and developed. Another means of teaching salesmanship consisted of "demonstration playlets" which dramatize concrete situations in retail selling. A study was made of store campaigns among salespeople. Also in connection with training salespeople are sections on Merchandise Information (merchandise manuals, methods of describing merchandise, etc.); Auxiliary Training toward Error Prevention (language, lettering, arithmetic) and General Training for Salespeople (Employee Magazines, Store Library, Retailing Courses). The part devoted to Training Executives discusses first the executive position, giving an analysis of duties, and outlining a study of "how to handle salespeople." Then follows a section concerning: training executives on the job, deportment training, development of personality, executive training course, and training executives by the project method. The third part of the book, Store Analysis, presents "service shopping" as means of analyzing the store service from the customers' viewpoint, and the analysis of various departments from the administrative viewpoint. Among the departments analyzed are some non-selling departments: the Bureau of Adjustment, in connection with which a clerical classification of personnel is presented; the Auditing and Billing and Receiving and Marking Departments. In Part IV is a summary of studies of employment tests under two headings: psychological tests in selecting department store salespeople, and a pre-employment merchandise information test. A few pages finally are devoted to Part V, The Bureau School, Its Courses and Its Students. In this chapter the curriculum for students in the Bureau is described. A list of publications of the staff appears in the appendix.—F. Hansen (New York City).

1285. Schulte, E. W. *Psychotechnik und Polizei*. (Psychotechnics and the police.) Oldenburg I. O.: Verlag Gerhard Stalling, 1928.—W. S. Hunter (Clark).

1286. Scott, W. D., & Howard, D. T. *Influencing men in business*. New York: Ronald, 1928. Pp. 172. \$2.50.—This is a revision by Howard of Scott's earlier book, by the same title, published in 1911. The first three chapters (Introduction, An Analysis of Deliberation, and An Analysis of Suggestion) and the last two chapters (Making Arguments Effective and Making Suggestions Effective) have been reworded to some extent but remain essentially as before. Chapters VII and VIII (When to Use Arguments and Suggestion in Influencing Men) have been expanded considerably. Chapters IV (Deliberation and Suggestion Contrasted) and VI (The Several

Types of Suggestion) are new. Hollingworth's expressions "long-circuit" and "short-circuit" mental processes are introduced in the new Chapter IV and are referred to throughout the remainder of the book. The several types of suggestion (Chapter VI) are based respectively on instinctive tendencies, habits, special complexes, and the crowd in mind. Students of psychology will find it interesting, containing a wealth of illustrative material. It is apparently, however, written primarily for the business man who has had little or no psychological training.—*E. K. Strong, Jr. (Stanford).*

1287. **Strang, R.** A method of gathering information about the profession of dean of women. *Voc. Guid. Mag.*, 1928, 7, 105-114.—Previous work on the position of dean of women is scanty and the information offered tends to be speculative rather than statistical. This article, therefore, is the report of a statistical investigation and attempts to answer the six questions which would be asked by a person planning to enter the profession. (1) A rather detailed description of the type and amount of work which a dean must perform is given. (2) There is a discussion of the training and experience necessary for such a position, together with a list of institutions offering specific training for advisors of girls, both for high school and college. (3) The number of such positions available in the U. S. A. and the annual turn-over is noted. (4) The salaries range from \$720 to \$3,892 per annum, with the median at \$2,456; 28% of the deans also receive room and board. (5) The conception of the function of the office of dean is gradually extending and becoming broader and more inclusive, with less emphasis on its ornamental and disciplinary sides. (6) The question whether a given individual is suited to this type of work or not, must, of course, be left to her. But the suggestion is made that records of other deans, successful and unsuccessful, be scrutinized for points on which to base one's judgment.—*D. E. Johannsen (Clark).*

1288. **Travagli, F.** [Professional orientation.] *Assistenza soc.*, 1928, No. 3.—The author discusses professional orientation with emphasis on abnormal youth, showing the value of exact evaluation of biotypological characteristics according to the Italian constitutionalist school.—*G. Vidoni (Genoa).*

1289. **Tubbs, E. V.** School training and successful careers. *Voc. Guid. Mag.*, 1928, 7, 120-123, 139.—The report of answers to a questionnaire sent to eminently successful men, in an effort to determine what single factors had had the greatest influence on their success. The answers all emphasize the importance of character training in schools and urge that curricula should be so constructed as to place more emphasis on this side and not quite so much on mere factual knowledge.—*D. E. Johannsen (Clark).*

1290. **Vaughn, J.** Positive versus negative instruction: an experimental study of the effects of various types of instruction on behavior. (*Publ. Nat. Bur. Casualty & Surety Underwriters, Educ. Ser., Vol. 2.*) New York: Nat. Bur. Casualty & Surety Underwriters, 1928. Pp. viii + 172.—This

study seeks to discover the relative effectiveness of different kinds of instruction which may be used to keep children from danger. It is a laboratory study of the responses of a small group of subjects representing each of the eight grades, the high school, and the graduate school of the university. One apparatus provides a situation in which the subject with the right hand moves a metal block along a slide in response to a green light signal and stops moving at a red signal. Rate of movement and time required for stopping are measured. Punishments are electric shocks. In other experiments the stylus and groove and the stylus and maze are used. Positive instructions and negative instructions with and without punishment are tested. The effectiveness of explanations of the way in which punishment will occur is tested. To be effective the instructions must catch and hold the attention of the subject. Mere positive telling does not do this. Ordinary warnings and threats are only temporarily effective, but acquire more enduring force when they are followed by actual experience of the injurious outcome of disregard of warnings. Even "demonstrations of the manner in which injury may take place have more effect on behavior than mere positive and negative instruction." The same statement could be made in favor of "drastic threats." There are marked individual differences. "Elaborate explanations of the reasons for making or not making a particular response seem to have no effect on children's behavior."—*J. C. DeVoss (San José Teachers' College).*

1291. **Viteles, M. S.** The clinical approach in vocational guidance. *Voc. Guid. Mag.*, 1928, 7, 1-9.—Vocational guidance must be based upon studies of the individual, rather than of a group, made by a counselor who is a specialist in guidance, not merely a teacher, psychiatrist or psychologist. The advice should be given after considering the factors of individual vocational interest, ability, temperament, health, appearance, education, experience, and social and economic conditions.—*M. B. Mitchell (Radcliffe).*

[See also abstracts 1006, 1350.]

## CHILDHOOD AND ADOLESCENCE

1292. **Baldwin, B. T.** The young child. Chicago: Amer. Library Assn., 1928. Pp. 35. \$0.50.—"Reading with a Purpose" is the title of a series of reading courses, covering a wide variety of subjects, published by the American Library Association. The present number was in preparation by Baldwin at the time of his death and was completed by two of his associates, Miss Marion Hossfeld and Mrs. May Pardee Youtz. Baldwin had been for ten years director of the Iowa Child Welfare Research Station of the State University of Iowa, and was one of the outstanding leaders in child study and child welfare. The booklet comprises a brief introduction to the study of the young child, followed by a guide to a few of the best books on the subject. Six books are briefly summarized, and lists of supplementary readings, correspondence courses, and other sources of material are appended. Training for child rearing



is a relatively new movement. An advertisement from an English periodical for a six-months' training course for kennel-maids is cited by way of emphasizing the lack of training required of the usual child's nurse maid. Physical needs of the child are briefly discussed, and the interdependence of these with mental needs. Play, adjustment, mental and social development, influence of training, are section headings. The books presented are not technical textbooks, but those which will help in the everyday problems confronting parents of young children. The reading course consists of six books.—*J. C. Fenton* (Calif. Bur. Juv. Res.).

1293. Baldwin, B. T. *Child psychology. A review of the literature, January 1, 1923, to March 31, 1928.* *Psychol. Bull.*, 1928, 25, 629-697.—A summary of 539 titles, under the headings: general treatises, the infant, the young child, the adolescent, constancy of the IQ, mental tests, conditions influencing mental growth, individual differences, racial differences, special aspects of development, child behavior, personality, and mental hygiene.—*J. F. Dashiell* (North Carolina).

1294. Bissell, E. E. *The effect of foster home placement on the personality of children.* *Family*, 1928, 9, 157-162.—The practice of frequent change of foster homes for behavior problem children, as well as the lack of training and understanding of the majority of foster parents, has a deleterious effect on the personality of these children. A more professional attitude and better training on the part of foster parents are needed.—*D. Grauer* (Chicago, Ill.).

1295. Bostrom, S. *Lantbarnets själsliv.* (The mental life of the rural child.) *Ark. f. Psykol. o. Ped.*, 1928, 7, 189-196.—Continuation of *Sammelreferat* of some literature on the rural child (see II: 2302).—*M. L. Reymert* (Wittenberg).

1296. Bovet, P. *The child's religion.* (Trans. by G. H. Green.) New York: Dutton, 1928. Pp. 215. \$2.00.—*W. S. Hunter* (Clark).

1297. Bureau of Education, Tokyo Municipal Government. *A study of abnormal children in special classes.* (Report in mimeograph, 1927).—476 abnormal children registered in special classes in various schools in Tokyo were studied in regard to their physical and mental development. 52.73% were assigned to special classes on account of poor scholarship. 14.94% had poor scholarship and speech defects. 13.66% were suspected of feeble-mindedness. 9.24% had physical disabilities. 7.16% had temperamental and behavior troubles. In 45.37% of the cases the fathers were found to be habitual drunkards. In 68.91% of the cases the mothers' milk was either insufficient or poor in quality. 46.85% of the fathers were manual laborers; 36.34%, low class merchants or artisans. 61.51% of the families were classified as being "very poor." 59.87% of the children received little or no family supervision. Height, weight, and chest measurement were close to the normal, but general health was found to be poor as compared with the normal. Four times as many boys and twice as many girls as among the normal were myopic. These children had also more ear, nose, and throat trouble than the nor-

mal.—*J. G. Yoshioka* (Institute for Juvenile Research).

1298. Cattell, P. *Dentition as a measure of maturity.* *Harvard Monog. Educ.*, No. 9. Cambridge: Harvard Univ. Press, 1928. Pp. 100. \$1.00.—The author attempts to derive an index of total dental development, for use in combination with other indices in measuring general physical maturity. The results of 11,656 examinations are reported in this study. Percentile charts of number of teeth erupted by ages are presented. At all ages the girls are consistently in advance of the boys in their dentition for North Europeans, Italians, and Jews. There is probably a real racial difference, but it is so small that it is probably unimportant. The present data appear to indicate that dentition and intelligence develop independently when the age factor is eliminated. 46 references.—*S. S. Ackerly* (Worcester State Hospital).

1299. Cattell, P. *Measurements of the growth of school children.* *J. Genet. Psychol.*, 1928, 35, 474-477.—The various tests of physical maturity used by investigators might well be combined into a single battery as has been so fruitfully done with mental tests. In a preliminary study, the intercorrelations are shown for dental age, anatomic index, and anthropometric development.—*J. F. Dashiell* (North Carolina).

1300. del Greco, Fr. [Mentality of the child.] *Il Manicomio*, 1928, 41, No. 1.—The intelligence of the child develops continuously, and for this reason it cannot be compared to that of primitive people which has been arrested at a stage of life that is practically instinctive. The child finds in play a preparation for and extrinsic manifestation of life, and, through the influence of his father and his teacher, he looks ahead and pushes on towards the intelligence of civilized man.—*L. Galdo* (Naples).

1301. Department of Education, Japanese Government. *Modified norms of the physical development of school children.* (Government Gazette, 1927, under ordinance No. 3 and regulation No. 2 of the Department of Education.)—The age norms of the physical measurement and developmental ratio for Japanese school children were converted into the metric system and are given as follows:

Age	Boys			Girls		
	Height (cm.)	Weight (kg.)	ht/wt	Height (cm.)	Weight (kg.)	ht/wt
6	102.7	16.0	0.156	101.5	15.4	0.152
7	126.7	17.5	0.164	105.5	16.9	0.160
8	111.2	19.2	0.173	109.7	18.4	0.168
9	115.8	21.0	0.181	114.2	20.2	0.177
10	120.3	22.9	0.190	118.8	22.1	0.186
11	124.9	24.9	0.199	123.6	24.3	0.197
12	128.8	27.1	0.210	128.5	27.0	0.210
13	133.6	29.9	0.224	135.2	30.8	0.228
14	139.4	33.6	0.241	139.4	34.7	0.249
15	146.4	38.2	0.261	143.9	39.0	0.271
16	152.7	44.5	0.291	146.7	42.7	0.291
17	157.0	48.2	0.307	147.9	45.1	0.305
18	159.1	50.7	0.319			
19	160.3	52.6	0.328			

—*J. G. Yoshioka* (Institute for Juvenile Research).

1302. Goodenough, F. L. Measuring behavior traits by means of repeated short samples. *J. Juv. Res.*, 1928, 12, 230-235.—The author describes a technique suitable for getting comparative data on traits possessed by the members of a closely associated group. The method involves frequent but brief observations of the subjects in their daily activities; the recording of the occurrence or non-occurrence for each subject during each observation period of certain specified and objectively defined forms of behavior; and the scoring of each subject in terms of the number of periods in which the significant behavior occurs. For such traits in nursery-school children as physical activity, general activity, laughter, conversation, social participation, leadership, anger, etc., the correlation between the scores derived by 2 observers working independently and on different days ranged from  $+.324$  to  $+.795$ , with most of the coefficients  $+.600$  or above. The merits claimed for the method are: directness, freedom from the influence of temporary conditions, wide applicability as far as traits are concerned, limited interference with the activities of those observed, limited demands on the observer's time, and quantitative results. It is questionable, however, whether the technique can be employed when the groups or individuals to be compared are operating under different conditions.—H. L. Koch (Texas).

1303. Green, G. H. A child's first attempt to interpret drawings. *J. Genet. Psychol.*, 1928, 35, 473-474.—J. F. Dashiell (North Carolina).

1304. Harding, J. R. Psychiatric study of school children, an aid to crime prevention. *Psychiat. Quar.*, 1928, 3, 462-464.—The public school offers the only real opportunity to test and record the eccentricities of our atypical children. Every school system should weed out the incorrigibles and get them into correctional institutions, and then reclaim the dullards and truants as far as possible through special class training. In this way the next generation will be spared the burden and ravages of many a young criminal. Crime is seldom spontaneous, but begins at an early age and matures after years of neglect, loafing, petty pilfering and dissipation.—E. T. Burr (Vocational Adjustment Bureau).

1305. Heuyer, G. L'Examen médico-psychologique des enfants délinquants. (The medical-psychological examination of delinquent children.) *Prophyl. ment.*, 1927, 3, 298-304.—The medical-psychological examination of delinquent children, according to the author, should consist of three parts: (1) a study of the social environment, hereditary and personal history of the child, (2) a pedagogical-psychological examination by means of achievement and Binet-Simon tests, and a study of the character traits and perversions, (3) a thorough physical and biological examination. This makes it possible for the physician to classify the child as normal, as a pervert, as physically or mentally ill, or as intellectually deficient, and thus enables him to recommend the best decision to the magistrate.—M. B. Mitchell (Radcliffe).

1306. Johnson, A. E. The unpardonable sin of exclusiveness. *Survey*, 1928, 60, 589-590.—It is

necessary to develop social consciousness in certain classes of subnormal, superior, or physically defective children by early conditioning in order to prevent mental disorder.—D. Grauer (Chicago, Ill.).

1307. Kubo, Y. On the results of the discrimination tests. *Jido Kenkyu-sho Kiyo* (Transactions of the Institute for Child Study), 1928, 9, 1-14.—360 children in Grades I-VI in Chida Elementary School, Hiroshima, Japan, were given four discrimination tests in sound, light, weight, and distance. The selection of the subjects was made as follows: 10 boys and 10 girls of superior scholarship were selected from each grade from I to VI; equal numbers of boys and girls of medium and inferior scholarship were also similarly selected, thus making up the total of 360. Four among the number did not complete all the tests. The grade norms established in the present study showed a slightly better discrimination in sound in the older ages. The ages had no effect on the discrimination in light and weight. A better discrimination in distance was noted in the older group; the improvement was particularly marked in the grades below III. Girls did a little better in sound discrimination than boys, but in light discrimination boys beat girls in all ages. No marked sex difference was noted in weight discrimination; girls tended to be slightly inferior. In distance discrimination girls were inferior on an average, but in certain grades girls did better. So there was no significant sex difference. There was no significant correlation among these four tests except that a slight positive correlation was noted between weight and distance and between light and weight. Sound discrimination correlated highest with singing, next highest with language. Light discrimination correlated highly with drawing. With these exceptions sound and light discriminations correlated very low with language, arithmetic, singing, and drawing. Weight discrimination correlated in general low with these four subjects. There was, however, a fair correlation with singing and arithmetic. Distance discrimination correlated rather high with drawing and singing, but low with the other two subjects.—J. G. Yoshioka (Institute for Juvenile Research).

1308. Lohbauer, H. Über die Begriffe von Psychischem im Kindesalter. (The psychological concepts in childhood.) *Arch. f. d. ges. Psychol.*, 1928, 64, 133-214.—The first part is devoted to an investigation of the development of psychological concepts. 454 public school children, divided into three age groups (8-10, 11-12, 13-14), and 99 continuation school pupils, constituting a fourth age group (14-17), were asked to define ten psychological concepts. The percentages of the correct answers for the four groups were 41, 64, 71, and 68 respectively. The answers were also analyzed for each concept separately according to the chief factors contained in the correct and incorrect solutions. The second part is devoted to an investigation, by means of the reaction word method, of the place of psychological concepts in the conscious life of children. Four groups of subjects were used: 17 pre-school children, 95 public school children, 50 continuation school pupils, and

8 adults. The stimulus words consisted of three concrete words and nine abstract words denoting psychological concepts. Among the various analyses of the reaction words the most important one was their classification into related and unrelated associations. In the case of the psychological concepts the percentages of the related associations for the four groups were 13, 32, 49, and 78 respectively. The reaction times and standard deviations decreased with increasing age and were larger for the abstract than for the concrete words. The author concludes that thinking of children is essentially concrete. Psychological concepts are acquired late. They usually are isolated and incompletely understood. Their place in the child's consciousness is a subordinate one. 57 tables.—*K. F. Muenzinger* (Colorado).

1309. Menzel, R. *Der Unverbesserliche*. (The incorrigible.) *Int. Zsch. f. Individual-psychol.*, 1928, 5, 398-408.—The author, employed as director in a governmental vocational guidance clinic, relates from memory detailed conversations held with a fifteen-year-old boy, his school master, and his father. The purpose of the article is evidently to show the psychological genetic factors and the clinician's method.—*O. N. de Weerdt* (Beloit).

1310. Minor, M. *Elternsünden*. (Sins of parents.) *Int. Zsch. f. Individual-psychol.*, 1928, 5, 387-396.—Attention is called in a popular manner to various harmful attitudes assumed by parents, such as gloomy pessimism, over-anxiety, repressiveness and conceit. No concrete cases.—*O. N. de Weerdt* (Beloit).

1311. Okada, M. A study of head circumference. *Nippon Gakko Eisei* (Japanese School Hygiene), 1927, 15, No. 3.—621 elementary school children in Tokyo had head measurements taken. It was found that the bright children (on the basis of scholarship) had slightly larger head circumferences than the dull children.—*J. G. Yoshioka* (Institute for Juvenile Research).

1312. Roubinovitch, J. *L'Examen systématique des enfants délinquants*. (Systematic examination of delinquent children.) *Prophyl. ment.*, 1927, 3, 295-298.—The causes of delinquency are many, both congenital and environmental. With the aid of the social service workers and the approval of the courts, a program of systematic examination (including a Binet-Simon test) is to be inaugurated for all delinquents under 18 in the vicinity of Paris.—*M. B. Mitchell* (Radeliffe).

1313. Schumacher, H. C. *Personality and its development as it is affected by financial dependency and relief-giving*. *Family*, 1928, 9, 140-144.—The child of dependent parents is likely to develop non-aggressive traits and tends to become emotionally dependent on the agency as he has been on his parents. It is therefore necessary to obtain an adequate history of the client in order to evaluate the degree of dependency and to stress the desirability of self-help on the part of the children in dependent families.—*D. Grauer* (Chicago, Ill.).

1314. Sheldon, R. C. *The need for individual guidance of children*. *Psychiat. Quar.*, 1928, 3, 467-

468.—The Big Brother and Big Sister Federation heartily endorses the use of capable psychiatrists in local case work. The most profitable place to reach children with the idea of preventing delinquency and later crime is in the 5th, 6th, and 7th grades of the public schools. Some 50,000 children are reached through this organization.—*E. T. Burr* (Vocational Adjustment Bureau).

1315. Stern, W. *Psychologie der frühen Kindheit*. (Psychology of early childhood.) (5th ed.) Leipzig: Quelle & Meyer, 1928. Pp. xv + 539. M. 12.80.—Stern's work on the first six years of childhood has been revised and enlarged to include the recent progress in child psychology. This edition is in general more comprehensive than previous ones. The personalistic point of view is emphasized even more strongly than before, and compared with other psychological theories such as rational psychology, Gestalt psychology, psychoanalysis and individual psychology which are critically evaluated. The Montessori method is also discussed critically. The treatment of experimental investigations has been greatly enlarged and most of the chapters in the section on esthetics have been rewritten. These chapters include discussions of play, music, story-telling and phantasy in their relation to the mental development of the child. The chapters on instincts, emotions and will have also been rewritten. The book is written in a manner which will make it useful to educators and parents as well as to professional psychologists. There are 11 plates. The bibliography is very extensive, having been greatly enlarged.—*M. Murphy* (Pennsylvania).

1316. Taylor, G. R. *The Commonwealth Fund child guidance program*. *J. Juv. Res.*, 1928, 12, 249-253.—A brief description of the objectives, administration, and results of the five-year program of the Commonwealth Fund in the interests of mental health.—*H. L. Koch* (Texas).

1317. Thomas, W. I., & Thomas, D. S. *The child in America*. New York: Knopf, 1928. Pp. xiv + 583 + xviii. \$5.00.—Typical behavior problems and programs for the amelioration of the child are critically discussed. The causative factors of maladjustment lie in two fields, "the organic peculiarities of the individual (physical, mental, emotional endowments and deficiencies) and the learning process, the acquisition of habits and attitudes." Methods of treating delinquency are yet in the experimental stage; opposed methods yield comparable results and differences in the delinquency rate in local situations are not satisfactorily explainable. The psychiatric approach to adjustment problems in schools and colleges and the effectiveness of psychiatric child guidance clinics cannot at present be evaluated. The proportion of adjustments to be attributed to analysis and the proportion due to changing situations and activities is not known. An evaluation of community organizations for child welfare shows them to be "contributions to our civilization and to the level of general culture" since they reflect a growing interest in and feeling of responsibility for the adjustment of behavior patterns.



Parental and pre-parental education is regarded as an important step toward the prevention of maladjustment in future generations. The psychometric approach to behavior studies has emphasized the concept of native endowment and its influence. The prognostic value of tests in relation to adjustment and success has not been sufficiently investigated. This applies also to the personality testing approach, although it has been useful for differentiating purposes. The morphological, physiological, and sociological approaches receive favorable evaluation. In a final chapter pertaining to the methodology of behavior study the authors advocate a behavioristic approach. "We regard this approach as the only one giving a rational basis for the control of behavior which may be a substitute for the common sense, perceptual, ordering-and-forbidding type of control which has been traditional and which, to the degree that it had efficiency in the past, has now broken down."—*N. L. Munn (Clark)*.

1318. **Tokyo Municipal Government. Statistical tables of physical measurements of Tokyo elementary school children.** (Official Report, 1927.)—Based upon the physical examination given in 1926 to 200,000 elementary school children in Tokyo according to the procedure prescribed by the Department of Education, the complete statistical results are given in four charts and tables covering 42 pages. Each of 15 wards within the city jurisdiction is tabulated separately. The tables show that the children in good residential sections are better developed physically than the children in poor sections. The chest measurement of the children residing in downtown sections where congestion is great is found also to be inferior.—*J. G. Yoshioka (Institute for Juvenile Research)*.

1319. **Tokyo Municipal Government. Health status of Tokyo elementary school children.** (Official Report (in mimeograph), 1927.)—The physical examination given in 1925 to Tokyo elementary school children showed that height exceeded the national norms through all the ages. Weight, above 14 years, however, was below the norms. Chest measurement was below the norms through all the ages. 79% of the boys and 82% of the girls had dental trouble. Children of 7-10 years showed the greatest number of dental cases; these percentages are high as compared with the percentages among all the children in Japan (49% for boys, 50% for girls). 6% of Tokyo children had trachoma; this percentage is about half as great as the percentage among all the children in Japan (13% for boys, 15% for girls).—*J. G. Yoshioka (Institute for Juvenile Research)*.

1320. **Vidoni, G. [The life of the child during the scholastic period with a consideration of criminality in minors.]** *Ann. dell'Osped. psichiat. di Messina*, 1928, No. 1-2.—The work is a résumé of certain lectures in which the author shows that there is frequently a pathological element in adolescent criminality. It must be taken into consideration that the explanation of these phenomena is often given us by the abnormal psychology itself of the adolescent. He is possessed of an activity which pushes

him towards adventure, towards the conquest of a certain position, without any control to correct the insufficiency of his inhibitions. This is the reason why we often find among youthful criminals fine examples of ability which, if well directed, might have made the criminal a hero or, often, a philanthropist. Adolescence is the age that puts the stamp on all future life. It is at this time that life is manifested with all its good or bad tendencies, its generous or egoistic impulses, and it is just at this time that a downfall may carry the adolescent over a precipice, while good counsel or a different example may raise him to the highest sublimations.—*G. C. Ferrari (Bologna)*.

1321. **Vidoni, G. [Assistance for illegitimate and abandoned children.]** *Dif. soc.*, 1928, No. 4.—The author describes the reform measures practiced in the Province of Genoa, which has introduced professional orientation into its administration. The author determined every child's profile by assembling anamnestic information, by studying the environment, and by examining the morphological and psychopathological conditions of the individual, the functioning of his senses, his reflectivity, the functioning of movement, his aspect and conduct, the need of activity or repose, orderliness and cleanliness, memory, intelligence, his affective life, character, will, avowed professional vocation, his school life and life at his place of work, his particular aptitudes, etc.—*G. C. Ferrari (Bologna)*.

1322. **Vidoni, G. [On the biological and social conditions of illegitimate children.]** *Dif. soc.*, 1928, 6.—As a result of several examinations, the author concludes that illegitimate children do not present characteristically those stigmata of inferiority which are commonly attributed to them. As is the case for all children, illegitimates show a very varied rating in value. The great majority of these children will be of average worth. At the extreme of the scale, on the contrary, there will be both inferior and superior ratings.—*G. C. Ferrari (Bologna)*.

1323. **Vidoni, G. [The biotypological examination of pupils.]** *Note e riv. psichiat.*, 1928, No. 1.—The author describes the methods which he employs in the study of a child for the purpose of individualizing him. To accomplish this, the child (if he does not present any particular anomalies) should always stay in a public school, which represents the natural world with its various values. Such a situation will train him for social life. By the use of this system, it is possible to individualize the instruction through allowing education to maintain its social aspect so as to permit personality to develop in a regular manner its tendencies, when they exist, or to develop correctly the modifications of his "state of indifference," if (as often happens) there is need of external opportunities, of exogenetic stimulation, environment, circumstances, etc., in order to find the means of fitting the child into some concrete activity.—*G. Vidoni (Genoa)*.

1324. **Wile, I. S. Child care or child development?** *Survey*, 1928, 61, 370-372.—The need for thorough psychological study of the children of child-care institutions, as well as an educational program

devised to meet their requirements, is pointed out.—*D. Grauer* (Chicago, Ill.).

1325. **Wrinch, M.** *Your children*. New York: Stokes, 1928. Pp. 251.—A very popular treatment of the education of children under school age. Most of the phases of child care and training are touched upon, but solely from the point of view of the mother as an educator. Little mention is made of the place and responsibility of other members of the household. The sections on the mother's psychology give in popular terms much of the present knowledge in regard to mental hygiene in this field. The work shows strongly the influence of Madame Montessori.—*A. H. Arlitt* (Cincinnati).

1326. **Yoshida, S.** *A statistical study of school children having ear, nose and throat diseases*. *Dainippon Jibi-inko-ka-kai Kaiho* (Bulletin of the Japanese Otological, Rhinological, and Pharyngological Association), 1927, 33, No. 8.—Among 8,073 elementary school children in Tokyo examined for physical defects 21.6% were found to be afflicted with ear diseases. 1,223 had obstruction, 250 had pathological tympanum, 172 suffered from chronic otitis media, 93 had perforated tympanum. 5.8% suffered from some kind of nasal disease. 290 were found to have enlarged adenoids and sinus infection; 156 were afflicted with nasal catarrh. 31.0% of the children had infected tonsils. 980 (10.9%) had severe tonsillitis and 1,536 (19.0%) had mild tonsillitis.—*J. G. Yoshioka* (Institute for Juvenile Research).

1327. **Zillig, M.** *Über das Verständnis des Kindes für den Erwachsenen*. (On the child's understanding of the adult.) *Arch. f. d. ges. Psychol.*, 1928, 62, 135-178.—This is an inquiry into the child's conception of the mental processes of adults, the particular problem being: How does the child conceive of the fear which adults experience? A questionnaire method was used with a group of children from 10 to 14. It is found that although the child differentiates his own fears from those of adults, he is scarcely able to appreciate the specifically adult fear-situation, and can clearly grasp only those kinds of fear which are due to the same types of object that arouse fear in himself. The higher and subtler forms of adult fear are almost unknown to him.—*D. McL. Purdy* (California).

[See also abstracts 1052, 1164, 1174, 1212, 1259, 1280, 1343, 1352, 1358, 1360, 1362.]

#### EDUCATIONAL PSYCHOLOGY

1328. **Adler, A.** *On teaching courage*. *Survey*, 1928, 61, 241-242.—The aim of education is to develop courage in the pupil so that he may feel he is capable of gaining social approval.—*D. Grauer* (Chicago, Ill.).

1329. **Aoki, S.** *The influence of the students' attitude toward their school subjects on their marks*. *Jido Kenkyu-sho Kiyo* (Transactions of the Institute for Child Study), 1928, 11, 15-42.—From the II, III, IV years (roughly corresponding to VIII, I, II years in high schools) at the Seventh Middle School,

Tokyo, boys of superior and inferior scholarship were selected. 43, 38, 39 bright boys and 31, 38, 30 dull boys came from II, III, IV years respectively; They were asked to rate their school subjects in terms of (1) preference, (2) value, and (3) effort required to master. The second year boys rated 17 subjects, which were Japanese, English, Chinese classics, composition, English composition, history, geography, ethics, natural history, algebra, physical education, jujit-u and fencing, singing, military drill, drawing. The third year boys rated 18 subjects. From the list for the second year singing was withdrawn, and the following were added: oral English, geometry, physics, chemistry. The fourth year boys rated 17 subjects. The list was the same as the third year minus oral English. It was found that preference for the subjects correlated highly with marks. This was particularly true in language, mathematics, physics, and chemistry, in which the bright and dull groups differentiated themselves most markedly. Value or importance of the subjects, in the judgment of the students, did not consistently correlate high with marks. The bright group, however, tended to value the subjects more highly than the dull group. Estimated effort did not correlate with marks. Effort that is helpful for high scholarship seems to come from liking or interest in the subjects.—*J. G. Yoshioka* (Institute for Juvenile Research).

1330. **Brown, T. J.** *Nutrition and scholarship*. *Amer. Phys. Educ. Rev.*, 1928, 33, 615-615.—1,600 pupils from the James Madison High School were rated according to intelligence and school grades. They were divided into three groups; the first group held grades of 75% or over, the second group from 60 to 75%, the third 60% or below. 16% were found in the first group, 68% in the second group, and 16% in the third group. The Wood-Baldwin-Woodbury Nutrition tables were used to rate these pupils on their nutrition excellence. In the first division 16.5% were found excellent in nutrition, 22% in the second division, and 24% in the third division. As a check these pupils were found to be 7% superior to the other high schools in the country.—*R. Stone* (Clark).

1331. **Bruner, H. B.** *Determining basic reading materials through a study of children's interests and adult judgments*. *Teach. Coll. Rec.*, 1929, 30, 285-309.—This study involved the cooperation of 1,500 teachers, 50,000 children, and some interested parents. Criteria of material suitable for children's reading were: (1) spontaneous questions of children in all situations where they could be observed; (2) children's rankings for interest of questions prepared by specialists; and (3) adult judgments of material in 2,913 courses of study in reading, language and grammar. Materials were also specially prepared based on criteria (1) and (2) above. All these materials were then assembled in seven experimental books, one primer and one reader for each of the first six grades, which were then submitted to children and teachers for evaluation in terms of interest and appropriateness. Tables set forth the results of the experiment, and a number of conclu-

sions are drawn. On the basis of children's and teachers' reactions it appears, for example, that only 22% of reading material has, according to present practice, its correct grade placement. "Recommended Lists of Reading Materials for Grades 4, 5, and 6" are appended.—*H. H. Remmers* (Purdue).

1332. **Clemens, P. B., & Neubauer, P. F.** A supervision project in multiplication. *J. Educ. Res.*, 1928, 18, 387-396.—Results of 7,920 multiplication tests on pupils in the Milwaukee schools from Grades 4B to 8A. The authors developed 42 "types of situations" of different sorts of multiplications. It was found that specific drill for two weeks on these situation types reduced the error from 7.6 to 0.8% between two test periods. It was shown that there are several types of zero difficulty instead of one as is usually accepted. Some of these types of zero difficulty are persistent even after drill.—*S. W. Fernberger* (Pennsylvania).

1333. **Crawford, C. C.** The technique of research in education. Los Angeles: Univ. Southern California Press, 1928. Pp. 320. \$2.50.—Fourteen distinct techniques of research in social, psychical and personnel fields have been studied and the practical problems and difficulties of each defined by questionnaire analysis. Graduate students, professors and the author have contributed to the solution of these. The book has been written as a text for the senior or graduate term of seventeen weeks, enabling the student to get acquainted with the leading authorities in each type of research and principles involved in it. Practice research is proposed in each division, or the student may be guided in taking the first steps in his own particular field. Additional chapters are devoted to Selecting Problems, Analysis and Interpretation of Data and Reporting Research. Each chapter concludes with exercises and questions and with a selected list of readings. An extended index is supplied. The book may be used with a course in advanced statistics or as a convenient aid in any of the social or psychological fields in which data are gathered and analyzed if a special course in techniques cannot be offered.—*V. M. Cady* (New York City).

1334. **Furbay, J. H.** Do college science students know how to observe? *School & Soc.*, 1929, 29, 13-14.—A simple information test concerning biological phenomena was given several hundred students who were entering an introductory course in biology in a small college. The test revealed the information limitations of the students to be gross. It is concluded that college students need sadly to be taught to observe.—*H. L. Koch* (Texas).

1335. **Garlough, L. N.** Achievement curves and their trend through the year. *J. Educ. Res.*, 1928, 18, 363-368.—Results from 50 students in biology in the University High School of the University of Minnesota with known IQ. The curves are analyzed with regard to Pearsonian type, skew, kurtosis and variation. The results show that the normal distribution of achievement is the exception; that the average skew is negative and that the trend throughout the year is toward a slight reduction of skew.

These achievement curves are flatter than the normal and tend to become still flatter during the year.—*S. W. Fernberger* (Pennsylvania).

1336. **Gates, A. I.** Recent advances in educational psychology. *School & Soc.*, 1929, 29, 1-8.—*H. L. Koch* (Texas).

1337. **Henmon, V. A. C., & Nelson, M. J.** Educational psychology. *Psychol. Bull.*, 1928, 25, 377-388.—A review of the literature (213 titles) of this field appearing between April, 1927, and April, 1928, does not indicate special trends or interests but is distributed widely.—*J. F. Dashiell* (North Carolina).

1338. **Herriott, M. E.** Why "honor" engineering students think they succeed in college. *School & Soc.*, 1928, 28, 829-830.—By means of the interview and check-list techniques the author attempted to discover why "honor" students in engineering thought they succeeded in their college work. 48 students gave their opinions. Thoroughness, concentrated effort when studying, persistent effort, regularity in preparing daily assignments, intelligence, interest in work, maturity, good study conditions, regularity of class attendance, and punctuality were all frequently mentioned by the group.—*H. L. Koch* (Texas).

1339. **Hussey, M. M.** Character education in athletics. *Amer. Phys. Educ. Rev.*, 1928, 33, 578-580.—Big-muscle fighting play is the most powerful factor in the molding of character. Through art, literature, and music come many of the refined traits, but the fundamentals of character are gained through participation in athletic activities. A person who lacks these fundamentals may be sensitive, refined, and cultured, but will lack the vital character qualities esteemed most highly by society.—*R. Stone* (Clark).

1340. **Jones, V.** Educational tests. *Psychol. Bull.*, 1928, 25, 407-421.—A review of literature (82 titles), including critical studies of tests themselves, the devising of new tests, and their application to diagnosis and prognosis and to the evaluation and improvement of instruction.—*J. F. Dashiell* (North Carolina).

1341. **Macauley, E.** An experiment in method for junior standards. *Forum Educ.*, 1928, 6, 217-240.—A controlled experiment for one year in environment and methods of presenting subject matter in Standards I and II of an English girls' school resulted in evidence of more thorough knowledge of arithmetic following individual work as contrasted with class methods; greater comprehension, wider vocabulary, better style in composition, richer content and more fluent speech after much and individually practiced silent reading; fuller information and more constructive interest in history, geography, nature study, literature and hygiene when freedom in discussion, dramatization and reading were given rather than formal class work. With the class-method and individual-method groups equalized at the beginning the final educational ages were 5 years and 6.1 years respectively. After the year of training a better social spirit was in evidence among those handled by the individual and freer processes.—*K. M. Cowdery* (Stanford).



1342. **McCall, W. A., & Bixler, H. H.** *How to classify pupils.* New York: Bureau of Publications, Teachers College, Columbia University, 1928. Pp. 83.—This book is an exposition of the use of grade scales (G scores). To be scientific and accurate grading and sectioning must be based on objective evidence as to pupils' capacities and achievements, which should be determined by standard tests. Six batteries of intelligence and achievement tests are recommended for this purpose, and the criteria for evaluating a standard test are given. General directions for administering and scoring tests are included, though emphasis is laid on the fact that published directions for specific tests should be strictly followed. The method of transmuting crude scores into G scores is given in detail. The greatest advantage of using G scores is that they are easier to interpret because by means of them scores on all tests can be put into comparable units. The technique for combining G scores on several tests and for weighting them is given. The method of preparing the class record sheet is presented, including manner of obtaining grade score for placement (Gp); Gp is a combination of intelligence and educational scores. Three tables are given for translating Gp scores into grades, one for each of the three school systems—7-, 8-, and 9-year elementary schools. The methods of classifying when promotions are either annual or semi-annual are reported. The final chapter deals with methods of handling various kinds of unusual situations. The book ends with 3 appendices: How to construct G tables for tests, How to secure tests and test materials, and Suggestions for further reading.—*D. E. Johannsen* (Clark).

1343. **Notson, E. B.** *Do children appreciate eye strain?* *School & Soc.*, 1928, 28, 760-761.—The distance from the eyes at which reading material is held tends in the case of children to be a function of age. From approximately 6.8 inches at 6 years there is a steady increase in this distance to approximately 11.6 inches at 13 years. Few children employ the recommended 14 inches, and few seem aware of eye strain. It is suggested that imitation is a factor determining a child's habitual reading distance.—*H. L. Koch* (Texas).

1344. **Powers, S. R.** *Research in science teaching.* *Teach. Coll. Rec.*, 1929, 30, 334-342.—The "curriculum must set forth the major goals of learning, and it must in some measure array the learning elements which are essential to the accomplishments of these goals." A thoughtful elaboration of the function of research in the teaching scheme from this point of view is made.—*H. H. Remmers* (Purdue).

1345. **Remmers, H. H.** *The relationship between students' marks and student attitude toward instructors.* *School & Soc.*, 1928, 28, 759-760.—Eleven instructors were rated on 10 traits significant from the point of view of teaching success by 409 college and high-school students. In general, there was no correlation (.070) between the students' ratings of the instructors and the marks the former received from the latter. In the case of some individuals, however, the correlations just described were significantly positive for some or all of the 10 traits,

the highest of the correlations for a single trait of a single teacher being .890 and for all traits of a single teacher, .317. Among the negative correlations for one trait the highest was —.860 and for all traits of a given instructor, —.142.—*H. L. Koch* (Texas).

1346. **Remmers, H. H., & Stalnaker, J. M.** *An experiment in remedial reading exercises at the college level.* *School & Soc.*, 1928, 28, 797-800.—"An experiment with 7 students was carried out to study the gain in speed and comprehension of motivated remedial speed drills. The results indicate that for approximately 3 hours of actual reading time spread over a period of nearly 2 months the increase in both these functions approximates 25 per cent for the material read. It is not known to what extent if any this gain transferred to other types of reading situations."—*H. L. Koch* (Texas).

1347. **Robbins, C. L.** *The will to work.* Evanston, Ill.: Row Peterson, 1928. Pp. xi + 211.—Motivation is regarded as an important aspect of character formation, and the "will to work" as largely social. Several hundred themes written by high school students and by advanced college students on "Why High School Pupils Study" were gathered and the motives given were tabulated and compared. The work situation in school is analyzed; devices, methods, and pitfalls in securing motivation by teachers are discussed. The author concludes that it is the teacher's function to arouse genuine interest in the work so that as the pupil performs his task he can identify himself with it, thus securing a feeling of real freedom.—*M. B. Mitchell* (Radeliffe).

1348. **Sandon, F.** *Some effects of age in selection examinations.* I. *Forum Educ.*, 1928, 6, 270-280.—For candidates in scholarship examinations for secondary school entrance and within a one-year range of age average marks were observed to increase with age increments due to increase in mental age, added attainments, group sampling, selection by previous removal of brighter boys, and age limitation rules. The amounts of increase are about the same per month of age whether based upon averages of the entire groups, on the best 70, best 40, or on the 15th, 30th, 45th, or 60th ranking candidate at each monthly age. For age 11 the optimum allowance per month of deviation from 11 to equalize opportunity for selection in the particular examinations studied would have been 2% of the maximum available mark.—*K. M. Cowdery* (Stanford).

1349. **Schulte, R. W.** *Eignungs- und Leistungsprüfung im Sport.* (Ability and capacity tests in sports.) Berlin: Verlag Guido Hackebell, 1928.—*W. S. Hunter* (Clark).

1350. **Scott, I. O.** *Follow-up for guidance.* *Voc. Guid. Mag.*, 1928, 7, 346-348.—*M. B. Mitchell* (Radeliffe).

1351. **Seaver, A. D.** *A brief annotated bibliography on guidance through mathematics.* *Voc. Guid. Mag.*, 1928, 7, 84-85.—The author gives a brief criticism of particular books bearing on modern trends in mathematics both as to methods of teaching and contents of courses, and a criticism of mod-

ern mathematical text-books in general.—*M. B. Mitchell* (Radcliffe).

1352. **Siebert, H.** *Beitrag zur Bestimmung der Interessenrichtung von Schülern auf Grund von Schülerfragen.* (Contribution to the determination of the direction of interests of students on the basis of their questions.) *Arch. f. d. ges. Psychol.*, 1928, 64, 93-124.—6,419 pupils, aged 8-18, were asked to write out any question they would like to ask and drop it into a box. They were not to sign their names, but sex, age and class were to be noted. 12,014 questions were received, the boys contributing more than the girls. Only 60% of all the questions could be referred to the subjects taught, geography and natural sciences receiving the largest share and mathematics, foreign languages, music, writing and drawing the smallest. Classifying the questions according to natural fields of interest it was found that nature and the self were referred to most frequently; persons, crafts, fatherland and school less; science and foreign countries least. The material was also analyzed according to the type of school and the age and sex of the questioners. There was an increase of interest in things spiritual at the expense of interest in things concrete with the advance of age and the transition from elementary to secondary schools. Girls were on the whole more interested in problems of the soul than in politics and crafts.—*K. F. Muenzinger* (Colorado).

1353. **Steen, F. H., & Estabrooks, G. H.** *Relation between introversion and scholastic interests.* *Voc. Guid. Mag.*, 1928, 7, 38-39.—The relation between scholastic interests (as determined by Section III of Strong's "Vocational Interest" blanks) and introversion (as determined by Laird's "Personal Inventory C2") was found to be lacking in 60 Colgate College freshmen.—*M. B. Mitchell* (Radcliffe).

1354. [Various.] *World Federation of Education Associations; Proceedings of the Second Biennial Conference, held at Toronto, Canada, August 7-13, 1927.* Augusta, Maine: Kennebec Journal Press. Pp. 834.—A hundred pages are given over to discussion of formal education in: (1) the pre-school years; (2) the elementary school; (3) the secondary schools; and (4) colleges and universities; and in each case an international array of speakers is presented. The last half of the volume is concerned with sectional meetings, the following being included: Health Education; The Problem Child; Handicapped Children; Country Youth and the Country School; International Correspondence of School Children; Preparation of Teachers for International Cooperation and Good Will; Character, Moral, and Religious Education; Geography and International Understanding; Thrift Education; Humane Education, etc.—*L. A. Averill* (Worcester Normal).

1355. **Vidoni, G.** [Schools for abnormal psychological cases at Genoa.] Genoa: Tipografia Reale, 1928.—Seventy-one cuts illustrate the functioning of these schools, which are governed fundamentally according to plans suggested by De Sanctis, G. C. Ferrari, and Pizzoli. The author describes the physical and psychological conditions of the students and illustrates the medical and pedagogical methods em-

ployed. Special emphasis is placed on professional orientation. Among the various results obtained, the author discusses the fact that a pronounced aptitude for work has been clearly demonstrated in certain abnormal cases. An experimental control confirmed the empirical observation, which in itself coincided with results gotten by Pieraccini, Martini, and Nenci from certain insane patients who needed more than the usual amount of time in order to overcome a condition of psychomotor inertia and to obtain maximum production. Having once been trained, however, they kept this particular disposition for work to an abnormal degree, as though by a condition of internal stereotyping, and they showed little sensitivity to fatigue.—*G. C. Ferrari* (Bologna).

1356. **Walker, G. J., & Walker, B.** *Annotated bibliography on guidance through teaching how to study.* *Voc. Guid. Mag.*, 1928, 7, 82-84.—A bibliography is given with a short criticism of each book, including a brief summary of its contents, the readers for whom it is useful, and comments on style.—*M. B. Mitchell* (Radcliffe).

[See also abstracts 1039, 1070, 1287, 1288, 1290, 1309, 1368.]

# BIOMETRY AND STATISTICS

1357. **Morton, R. L.** *Laboratory exercises in educational statistics.* New York: Silver, Burdett, 1928. Pp. vii + 145 + lii.—A manual intended for use in conjunction with the standard textbooks, to which frequent and detailed reference is given. There are 50 exercises, gathered in 12 sections and two parts (elementary and advanced); each exercise consists of brief orienting statement, problems (answers in the back of the book), questions necessitating reading and investigation, and references. There is a bibliography and an index. The tables, gathered in the appendix, are of squares and square roots to 1,000, four- and five-place common logarithms, logarithms of  $(1-r^2)$  and its square root, ordinates and areas of the normal curve in abscissa units,  $P.E.r$  in terms of  $r$ , values of  $r$  corresponding to  $p$  and to  $R$ , and values of  $k$  and  $(1-k)$ .—*R. R. Willoughby* (Clark).

[See also abstracts 1093, 1256, 1311.]

# MENTAL TESTS

1358. **Baldwin, B. T., & Wellman, B. L.** *The peg board as a means of analyzing form perception and motor control in young children.* *J. Genet. Psychol.*, 1928, 35, 389-414.—The four Wallin peg boards were given with a modification of his method to 269 children between 2 and 6 years of age. The distributions of scores, errors, and time for the different age groups are furnished, and an analysis of the errors made. Perseveration was frequently observed, particularly in the younger. When the task was easy, the children arranged the pegs in systematic fashion, but when it grew more complicated the difficult new element became dominant in attention, with orderliness secondary. On repeated tasks some improvement was observed.—*J. F. Dashiell* (North Carolina).

1359. Carroll, R. P. What is intelligence? *School & Soc.*, 1928, 28, 792-793.—The author, after attempting a critical evaluation of the concepts of intelligence which 9 modern psychologists hold, offers as his own the following: "Intelligence is the ability to see things in their various relationships, to think complexly and coordinately in such a way as to produce a composite, or more or less unified reaction. It has its basis in neural capacity and may be defined as the coordinate functioning of related reaction groups. The degree or amount of one's intelligence is determined by his native capacity or neural complexity. It is inseparable from depth or breadth of comprehension."—H. L. Koch (Texas).

1360. Furfey, P. H. The relation between socioeconomic status and intelligence of young infants as measured by the Linfert-Hierholzer scale. *J. Genet. Psychol.*, 1928, 35, 478-480.—Correlations in the case of infants 12 months and younger were found to be insignificant. Need is indicated for checking the Linfert-Hierholzer scale for infants against such a general intelligence scale as the Stanford-Binet.—J. F. Dashiell (North Carolina).

1361. Garrett, H. E., & Schneek, M. R. A study of the discriminative value of the Woodworth personal data sheet. *J. Gen. Psychol.*, 1928, 1, 459-471.—The purpose of the present study was to determine whether it is possible to classify a person as probably normal or probably psychoneurotic on the basis of the number or kind of wrong answers which he gives on the Woodworth personal data sheet. An analysis was made of data obtained from 103 (normal) college freshmen and 256 psychoneurotics. "In terms of gross score, or range of scores, on the Personal Data Sheet, presumably normal persons cannot be reliably distinguished from avowed psychoneurotics. Of the 116 questions in the Inventory, 42 were found to be especially significant for purposes of differentiation. Of these, 25 were selected on the basis of their percentage excess in the abnormal group; the remaining 17 were chosen because they returned 20% or more wrong answers in the abnormal group. Of the 116 questions in the Inventory, only 16 show a percentage excess of 10% or more in any neurotic group. Of these 16, 4 are referable to epilepsy, and 12 to neurasthenia. This wide community of symptoms emphasizes the overlapping in the neuroses. Thirteen of the 16 'differential' questions described appear in Laird's Schedule

B2, Colgate Mental Hygiene Tests. Of these 13 questions, 6 agree and 7 disagree with Laird's classification. This result shows the difficulty involved in an a priori classification of neurotic trends." 4 tables.—H. Cason (Rochester).

1362. Goodenough, F. L., & Shapiro, G. The performance of pre-school children of different social groups on the Kuhlman-Binet tests. *J. Educ. Res.*, 1928, 18, 356-362.—Study of the results of 380 children between the ages of 18 and 54 months from six groups in the social scale ranging from professional to unskilled laborers. All the children were given the Kuhlman Revision of the Binet Tests, with an average interval of six weeks between the two examinations. The average scores showed a consistent and fairly regular decrease of the mean IQ of the children as we go down the scale of occupational classes. This is entirely in conformity with earlier studies on older children on a variety of tests. In order to analyze the situation further, the authors divided the children into two groups, the first including the three higher occupational classes and the second the three lower. An analysis was then made with respect to each of the tests in the Kuhlman-Binet scale. This analysis indicates that the lower group shows a superiority in the motor tests, possibly as a result of greater physical maturity. The greatest superiority of the higher social group over the lower is on the language tests. No reliable difference in the pattern of performance of the two groups on either tests of acquired information or the adaptive behavior tests is apparent.—S. W. Fernberger (Pennsylvania).

1363. Jansson, A. Intelligensprövens konstans. (The constancy of the intelligence test.) *Ark. f. Psykol. o. Ped.*, 1928, 7, 125-152.—Different series of presumably equal difficulty, of absurdities, fables, sentence construction (three words), disarranged sentences and substitution tests were given to 23 rural school children of the 5th and 6th grade, for three consecutive weeks, in such a way that one kind of test only was administered on each week day; for instance, absurdities every Monday and substitution tests on Tuesdays, etc. On the whole very little constancy in rank order was found either within the series of one and the same kind of test material, or between the different kinds of tests, as is apparent from the following main table presented by the writer:



Child	Teacher's estimate	Average rank order of all tests	Series of absurdities			Series of fables		Series of sentence construction			Average of all preceding tests	Disarranged sentences		Substitution test, alphabetic code		
			1	2	3	1	2	1	2	3		1	2	1	2	3
A	1	1	—	—	4	2	1	—	—	9	3	—	—	—	—	1
B	2	3	2	5	4	9	7	13	4	4	5	1	6	1	7	—
C	4	2	9	1	2	1	3	2	3	9	2	3	1	6	9	—
D	8	9	6	14	4	12	10	4	10	9	11	6	2	—	5	6
E	11	10	2	5	10	17	17	11	4	7	12	7	11	3	10	3
F	16	14	22	14	18	19	—	20	10	9	20	10	13	2	1	1
G	23	23	21	22	—	20	20	21	19	—	23	21	21	20	13	—
H	6	12	11	5	2	14	2	9	12	9	9	4	—	22	19	13
J	19	21	11	14	10	20	19	18	17	17	19	19	22	19	20	12
K	21	18	18	12	18	—	—	16	6	17	17	14	9	12	15	6
L	8	3	1	1	1	6	14	5	2	3	3	14	9	3	2	9
M	5	6	2	5	7	2	3	6	1	1	1	8	3	16	18	11
N	14	7	2	12	7	6	6	3	—	4	6	4	5	15	—	10
O	17	16	11	14	10	16	16	19	16	19	18	8	4	10	16	15
P	18	19	18	20	10	12	7	15	—	21	16	20	15	10	12	14
R	22	23	22	20	23	—	—	23	—	22	24	21	19	21	21	3
S	20	22	11	—	18	17	8	22	16	19	22	12	17	—	22	18
T	12	13	9	5	10	8	9	11	9	9	12	14	19	6	13	20
U	3	7	11	1	18	5	3	1	6	4	8	1	6	6	10	17
V	7	5	6	5	7	4	10	6	6	1	7	—	—	12	2	3
X	10	15	17	5	10	14	13	9	12	7	14	10	16	17	17	8
Y	13	11	6	1	10	9	15	6	12	9	10	12	6	6	7	19
Z	15	16	11	14	10	11	12	13	19	—	15	18	17	14	4	—
A	—	20	20	14	18	—	—	16	17	9	20	14	11	18	16	15

The criteria for scoring of the various tests are given in detail and the tabular results discussed. Interviews with the children immediately after testing failed to bring any light on possible reasons for the rank differences.—*M. L. Reymert* (Wittenberg).

1364. Jones, H. E., & Hsiao, H. H. A preliminary study of intelligence as a function of birth order. *J. Genet. Psychol.*, 1928, 35, 428-433.—No significant correlation was found between intelligence and birth order in 614 pairs of siblings obtained from isolated New England communities.—*J. F. Dashiell* (North Carolina).

1365. May, M. A., Hartshorne, H., & Welty, R. E. Personality and character tests. *Psychol. Bull.*, 1928, 25, 422-443.—146 titles reviewed, including studies both of test technique and of quantitative findings on specific personality traits, on emotions, on interests, and on social-ethical judgments.—*J. F. Dashiell* (North Carolina).

1366. Pintner, R. Intelligence tests. *Psychol. Bull.*, 1928, 25, 389-406.—A review of literature (152 titles) on various aspects of this field, includ-

ing: general considerations as to intelligence and the IQ; new tests and scales; and results of application to many classes, such as college students, delinquents, subnormal and supernormal, races, etc.—*J. F. Dashiell* (North Carolina).

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[See also abstracts 1085, 1158, 1261, 1311, 1340, 1342.]



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